

MID-SEPTEMBER 1959

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ELECTRICAL CONSTRUCTION AND MAINTENANCE

WITH ELECTRICAL CONTRACTING

electrical
products
guide
issue

TRADE NAMES
TECHNICAL DATA
EQUIPMENT & SUPPLIES
plus
Editorial Index, 1958-59

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PRODUCT SELECTION DATA

PRODUCT DIRECTORY

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McGraw-Hill Index, U.S. Patent No. 2,480,430. Foreign patents issued; others pending.

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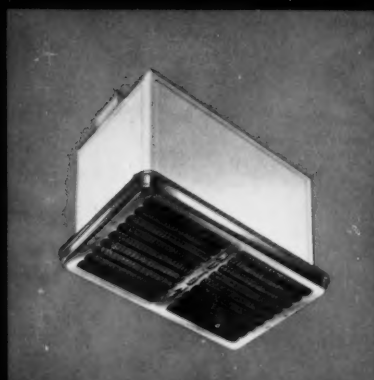
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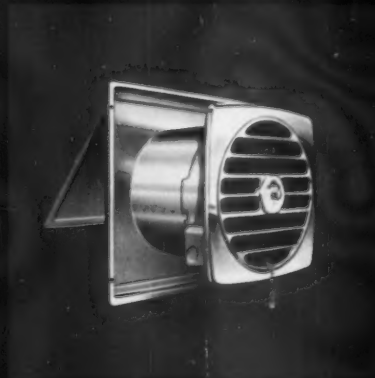
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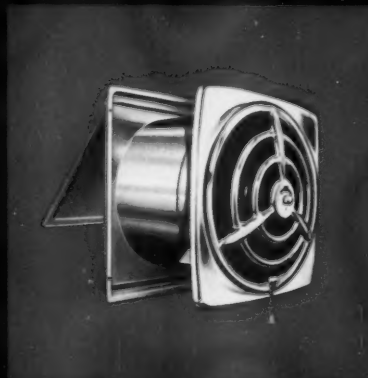
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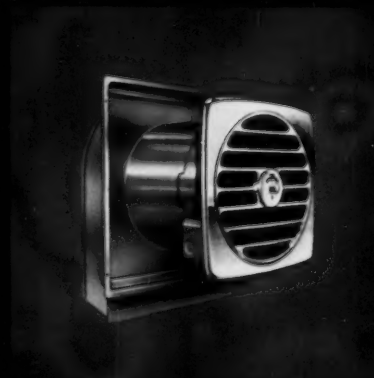
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Model 811 Deluxe 10" pull chain Wall Fan. Weather-tight shutter. \$36.25 list.



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NuTone's Intercom-Radio is a step-saver. Fills the home with radio music.

NuTone Door Chimes make any home more inviting with a "friendly greeting".

U. S. and Foreign Patents



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DOOR CHIMES



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NuTone's Exhaust Fans get rid of cooking odors grease, steam, excess heat.

NuTone's Range Hood-Fan acts like a huge vacuum to keep kitchen air fresh.



EXHAUST FANS



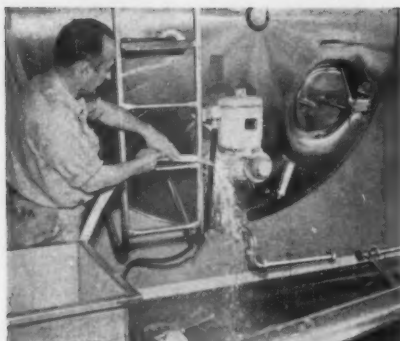
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NuTone *Electrical Built-Ins*

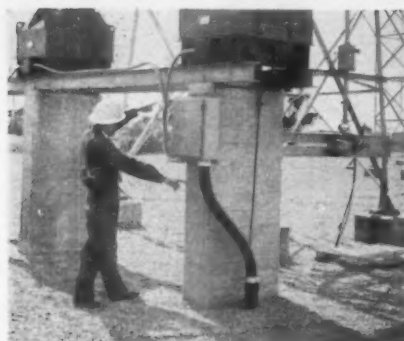
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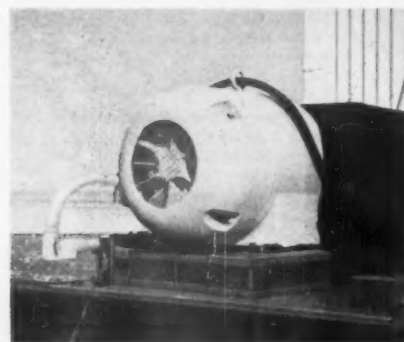
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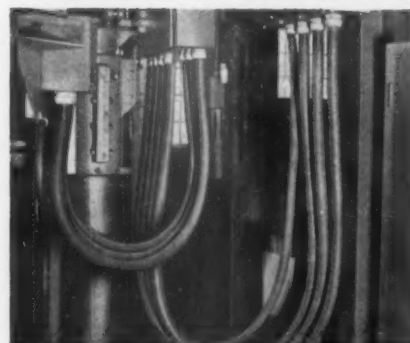
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MISALIGNMENT



OUTDOORS



MOVING CONNECTIONS

ON THE ROUGHEST JOBS SEALTITE PROTECTS WIRING

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It is being used successfully in wet locations, in tunnels, power plants, steel mills, canneries, chemical industries and in many outdoor applications. Sealtite comes in three types:

TYPE U. A. — Specifications for Type U. A. (Underwriters' Laboratories Listed) and Type C. S. A. (Canadian Standards Association Approved). Construction: flexible galvanized steel core, positive ground and tough extruded outer cover.

TRADE SIZE (Ins.)	INSIDE DIAMETER		OUTSIDE DIAMETER		Appr. Inside Bend Diam. (Ins.)	Approx. Shipping Wgt. (Lbs.) Per Std. Carton
	Min.	Max.	Min.	Max.		
3/8	.484	.504	.690	.710	6	60
1/2	.622	.642	.820	.840	7	70
3/4	.820	.840	1.030	1.050	10	70
1	1.041	1.066	1.290	1.315	12	90
1 1/4	1.380	1.410	1.630	1.660	15	70

TYPE E. F. † (Extra Flexible)—for machine tools and industrial equipment. (Meets J.I.C. requirements)

TRADE SIZE (Ins.)	INSIDE DIAMETER		OUTSIDE DIAMETER		Appr. Inside Bend Diam. (Ins.)	Approx. Shipping Wgt. (Lbs.) Per Std. Carton
	Min.	Max.	Min.	Max.		
3/8	.485	.505	.690	.710	4	60
1/2	.620	.640	.820	.840	5	60
3/4	.815	.835	1.030	1.050	5	70
1	1.030	1.055	1.290	1.315	7	60
1 1/4	1.370	1.395	1.635	1.660	8	80
1 1/2	1.575	1.600	1.875	1.900	11	55
2	2.020	2.045	2.350	2.375	14	75
2 1/2	2.480	2.505	2.850	2.875	19	105
3	3.070	3.100	3.470	3.500	23	80
4	4.000	4.040	4.460	4.500	27	105

Commercial tolerances apply on above figures.

ELECTRICAL WHOLESALE stock Sealtite. Buy it in long, random lengths on nonreturnable wooden reels, at no extra cost. Available in sturdy cartons that are easier to store and carry to the job. Liquid-tight connectors also are available from wholesalers' stocks. For information write: Anaconda Metal Hose Division, The American Brass Company, Waterbury 20, Connecticut. In Canada: Anaconda American Brass Ltd., New Toronto, Ontario.

†Pat. applied for

89142



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CUTAWAY SECTION of Type U. A. Sealtite shows tough polyvinyl jacket over flexible galvanized steel core. Copper conductor wound spirally inside conduit gives positive ground.

Insist on the conduit marked

SEALTITE®

Flexible, Liquid-Tight Conduit

an **ANACONDA®** product

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So, though we're not listed under every classification, chances are we do have what you need for wiring, lighting, communication, ventilation or power distribution. Just consult your near-by Graybar Representative — the list below is only a small sampling of the items on which he can provide complete prices and specifications.

"JUST ABOUT EVERYTHING IN THE BOOK"

Air Conditioners — unit type

Alarms — fire

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Annunciators — drop, lamp, electric reset

Batteries — wet and dry

BELLS — hazardous location bells, buzzers and horns; also standard types

Blocks — terminal

BOXES — metal outlet and switch

Boxes — all other types

Breakers — oil and air circuit

Bulbs — incandescent

BUS-DUCT

Cabinets — cutout, distribution, fuse panelboard, transformer

CABLE — rubber-covered

Cable — all other types

Capacitors

Centers — load and distribution

Compounds

Conduit — clay, flexible metallic

CONDUIT — flexible, non-metallic, rigid steel

Connectors — all types

CORD — twisted or parallel

Cord — all other types

Cutouts

DRILLS — portable electric

Duct — power, underfloor

Fans — attic, ventilator, propeller; blowers

FANS — exhaust

Fittings — conduit and cable, all kinds

FIXTURES — commercial and industrial incandescent

Fixtures — commercial and industrial fluorescent

Fixtures — floodlighting, street lighting

Fixtures — hazardous location, vaportight

FUSES — renewable plug

Fuses — all other types

Hangers — conduit, fixture, outlet box

HEATERS — space

Horns — signal

LAMPS — fluorescent tube

Lamps — incandescent

Lamps — all other types

Lugs — solderless

METERS — watt-hour testing

MOTORS — AC single phase

Motors — all other types

Outlets — hanger

PANELBOARDS

Plugs — all types

Receptacles — all types

RELAYS — electronic industrial

SIGNALS — nurse and doctor call

Sirens — electric

Sockets — all types

Solenoids — AC, DC, rotary

STARTERS — AC and DC motor

Switchboards

SWITCHES — combined circuit breaker and starting

Switches — all other types

Switchgear — metal-clad

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Systems — calling, signaling, public address

TAPE — friction

Tape — all other types

Tools — hand and power, all types

TRANSFORMERS

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Ventilators

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WIRE — rubber-covered

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ELECTRICAL PRODUCTS GUIDE ISSUE

VOL. 58 NO. 9A

MID-SEPTEMBER, 1959

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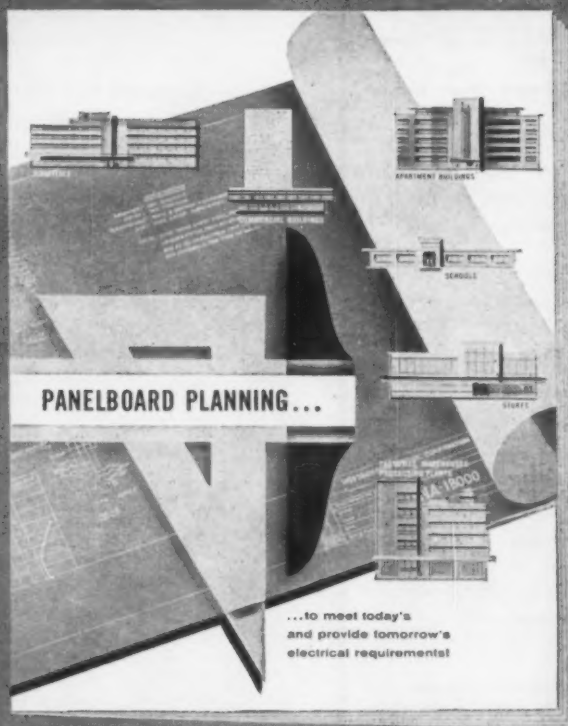
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GRAPHICAL SYMBOLS FOR ARCHITECTURAL PLANS

Ceiling Wall

- Outlet
- ⊖ Blanked Outlet
- ⊖ Drop Cord
- ⊖ Electric Outlet; for use only when circle used alone might be confused with columns, plumbing symbols, etc
- ⊖ Fan Outlet
- ⊖ Junction Box
- ⊖ Lamp Holder
- ⊖ Lamp Holder with Pull Switch
- ⊖ Pull Switch
- ⊖ Outlet for Vapor Discharge Lamp
- ⊖ Exit Light Outlet
- ⊖ Clock Outlet (Specify Voltage).

GENERAL OUTLETS

- ⊖ Duplex Convenience Outlet
- ⊖ Convenience Outlet other than Duplex 1=Single, 3=Triplex, etc
- ⊖ Weatherproof Convenience Outlet
- ⊖ Range Outlet
- ⊖ Switch and Convenience Outlet
- ⊖ Radio and Convenience Outlet
- ⊖ Special Purpose Outlet (Des. in Spec.)
- ⊖ Floor Outlet

SWITCH OUTLETS

- S Single Pole Switch
- S₂ Double Pole Switch
- S₃ Three Way Switch
- S₄ Four Way Switch
- S_D Automatic Door Switch
- S_E Electrolier Switch
- S_K Key Operated Switch
- S_P Switch and Pilot Lamp
- S_{CB} Circuit Breaker
- S_{WCB} Weatherproof Circuit Breaker
- S_{MC} Momentary Contact Switch
- S_{RC} Remote Control Switch
- S_{WP} Weatherproof Switch
- S_F Fused Switch
- S_{WF} Weatherproof Fused Switch

SPECIAL OUTLETS

- _{a,b,c,etc} Any standard symbol as given above with the addition of a lower case subscript letter may be used to designate some special variation of standard equipment of particular interest in a specific set of architectural plans.
- _{a,b,c,etc} When used they must be listed in the Key of Symbols on each drawing and if necessary further described in the specifications.

PANELS, CIRCUITS, AND MISCELLANEOUS

- Lighting Panel
- ▨ Power Panel
- Branch Circuit; Concealed in Ceiling or Wall
- Branch Circuit; Concealed in Floor
- Branch Circuit; Exposed
- Home Run to Panel Board. Indicate number of circuits by number of arrows.
Note: Any circuit without further designation indicates a two-wire circuit. For a greater number of wires indicate as follows: --- (3 wires)
--- (4 wires), etc.
- Feeders. Note: Use heavy lines and designate by number corresponding to listing in Feeder Schedule.
- ⊖ Underfloor Duct and Junction Box. Triple System.
Note: For double or single systems eliminate one or two lines. This symbol is equally adaptable to auxiliary system layouts.

- ⊖ Generator
- ⊖ Motor
- ⊖ Instrument
- ⊖ Power Transformer (Or draw to scale.)
- ⊖ Controller
- ⊖ Isolating Switch

AUXILIARY SYSTEMS

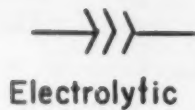
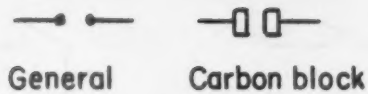
- ⊖ Pushbutton
- ⊖ Buzzer
- ⊖ Bell
- ⊖ Annunciator
- ⊖ Outside Telephone
- ⊖ Interconnecting Telephone
- ⊖ Telephone Switchboard
- ⊖ Bell-Ringing Transformer
- ⊖ Electric Door Opener
- ⊖ Fire Alarm Bell
- ⊖ Fire Alarm Station
- ⊖ City Fire Alarm Station
- ⊖ Fire Alarm Central Station
- ⊖ Automatic Fire Alarm Device
- ⊖ Watchman's Station
- ⊖ Watchman's Central Station
- ⊖ Horn
- ⊖ Nurse's Signal Plug
- ⊖ Maid's Signal Plug
- ⊖ Radio Outlet
- ⊖ Signal Central Station
- ⊖ Interconnection Box
- ⊖ Battery

Auxiliary System Circuits

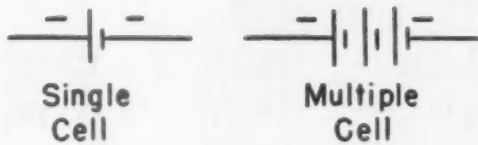
Note: Any line without further designation indicates a 2-wire system. For a greater number of wires designate with numerals in manner similar to --- 12-No. 18W-3/4"C., or designate by number corresponding to listing in Schedule.

- ⊖_{a,b,c} Special Auxiliary Outlets.
Subscript letters refer to notes on plans or detailed description in specifications.

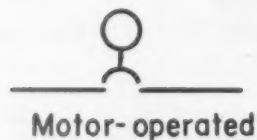
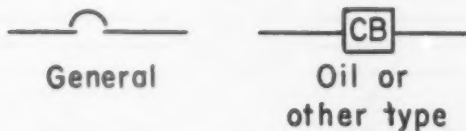
ARRESTERS



BATTERIES



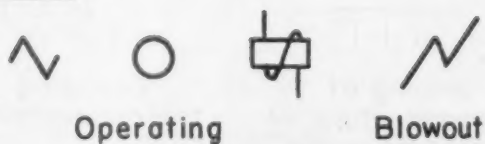
CIRCUIT BREAKERS



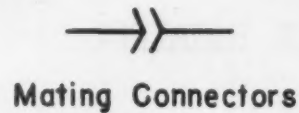
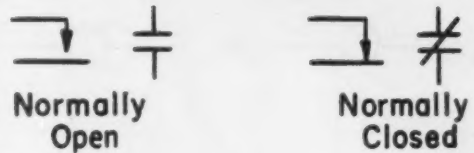
CAPACITORS



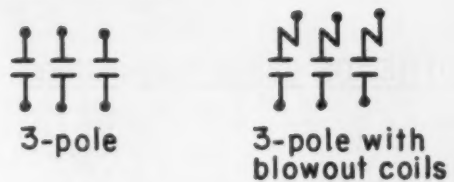
COILS



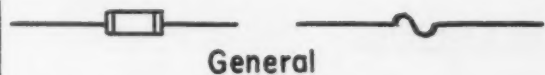
CONTACTS



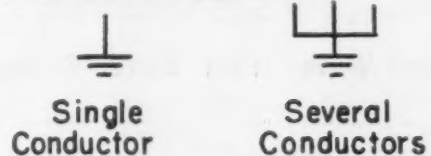
CONTACTORS



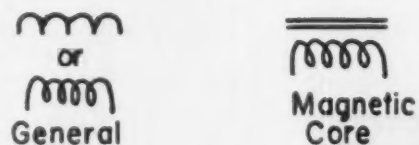
FUSES



GROUND CONNECTION



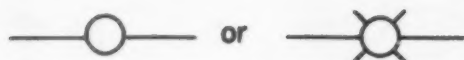
INDUCTORS



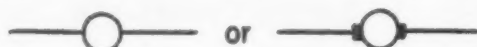
GRAPHICAL SYMBOLS FOR POWER AND CONTROL

(continued)

LAMPS

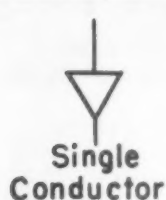


MACHINES, ROTATING



Motors, Generators, etc.

POTHEADS (Cable Terminators)



RECTIFIERS

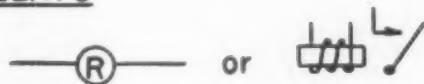


Half Wave

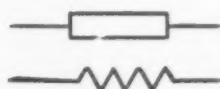


Full Wave (Bridge)

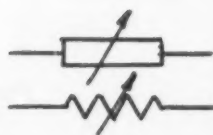
RELAYS



RESISTORS



Fixed



Variable

SWITCHES



Single Throw



Double Throw

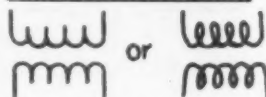


Knife



Pushbutton

TRANSFORMERS

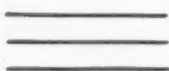


General



With Core

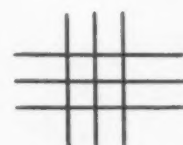
WIRING



Conductors



Spliced Conductors



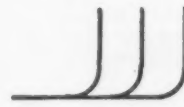
Crossing of conductors, not connected



Crossing of conductors, connected



Joining of conductors, not crossing



Grouping of conductors

CODE TABLES

Table 1. Maximum Number of Conductors in Conduit or Tubing

Types RF-2, RFH-2, R, RH, RW, RH-RW, RHW, RHH, RU, RUH, RUW, SF and SFF
Types TF, T, TW and THW

Size AWG or MCM	Maximum Number of Conductors in Conduit or Tubing (Based upon % conductor fill, Table 3, Ch. 10, for newwork)																		
	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12	14	16	18	20
18	7	12	20	35	49	80	115	176											
16	6	10	17	30	41	68	98	150											
14	4	6	10	18	25	41	58	90	121	155									
12	3	5	8	15	21	34	50	76	103	132	208								
10	1	4	7	13	17	29	41	64	86	110	173								
8	1	3	4	7	10	17	25	38	52	67	105	152							
6	1	1	3	4	6	10	15	23	32	41	64	93							
4	1	1	1	3	5	8	12	18	24	31	49	72							
3	1	1	1	3	4	7	10	16	21	28	44	63							
2	1	1	1	3	3	6	9	14	19	24	38	55							
0	1	1	1	3	4	7	10	14	18	29	42								
00																			
000																			
0000																			
250																			
300																			
350																			
400																			
500																			
600																			
700																			
750																			
800																			
900																			
1000																			
1250																			
1500																			
1750																			
2000																			

Table 3: Combination of Conductors

For groups or combinations of conductors not included in Table 1, it is recommended that the conduit or tubing be of such size that the sum of the cross-sectional areas of the individual conductors will not be more than the percentage of the interior cross-sectional area of the conduit or tubing shown in the following table:

Per Cent Area of Conduit or Tubing

	Number of Conductors				
	1	2	3	4	Over 4
Conductors (not lead covered)	53	31	43	40	40
Lead-covered conductors . . .	55	30	40	38	35
For rewiring existing raceways for increased load where it is impracticable to increase the size of the raceway due to structural conditions.	60	40	50	50	50

See Note to Table 5 for size of conduit or tubing for combinations of conductors not shown in Table 1.

**Full Load Currents (Amperes)
Table 430-147: DC Motors**

HP	115V	230V	550V
1/4	3.8	1.5	..
1/2	5.4	1.9	..
3/4	7.4	2.7	..
1	9.6	3.7	1.6
1 1/2	13.2	4.8	2.0
2	17	6.6	2.7
3	25	8.5	3.6
5	40	12.5	5.2
7 1/2	58	20	8.3
10	76	29	12
15	112	38	16
20	148	56	23
25	184	74	31
30	220	92	38
40	292	110	46
50	360	146	61
60	430	180	75
75	536	215	90
100		268	111
125		355	148
150		443	184
200		534	220
		712	295

These values of full-load currents are for motors running at usual speed.

Table 430-148: 1-Phase AC Motors

HP	115V	230V	440V
1/4	4.4	2.2	..
1/2	5.8	2.9	..
3/4	7.2	3.6	..
1	9.8	4.9	..
1 1/2	13.8	6.9	..
2	16	8	..
3	20	10	..
5	24	12	..
7 1/2	34	17	..
10	56	28	..
	80	40	21
	100	50	26

These values of full-load currents are for motors running at usual speeds and motors with normal torque characteristics. Motors built for especially low speeds or high torques may have higher full-load currents, in which case the nameplate current ratings should be used.

To obtain full-load currents of 208 and 200-volt motors, increase corresponding 230-volt motor full-load currents by 10 and 15 per cent, respectively.

Table 430-150: 3-Phase AC Motors

HP	Induction Type Squirrel-Cage and Wound Rotor Amperes					Synchronous Type Unity Power Factor Amperes		
	110V	220V	440V	550V	2300V	220V	440V	550V
1/4	4	2	1	.8				
1/2	5.6	2.8	1.4	1.1				
3/4	7	3.5	1.8	1.4				
1	10	5	2.5	2.0				
2	13	6.5	3.3	2.6				
3		9	4.5	4				
5	15	7.5	6					
7 1/2	22	11	9					
10	27	14	11					
15	40	20	16					
20	52	26	21					
25	64	32	26		7	54	27	22
30	78	39	31	8.5		65	33	26
40	104	52	41	10.5		86	43	35
50	125	63	50	13		108	54	44
60	150	75	60	16		128	64	51
75	185	93	74	19		161	81	65
100	246	123	98	25		211	106	85
125	310	155	124	31		264	132	106
150	360	180	144	37		318	159	127
200	480	240	192	48		424	212	168

For full-load currents of 208 and 200-volt motors, increase the corresponding 230-volt motor full-load current by 6 and 10 per cent, respectively.

These values of full-load current are for motors running at speeds usual for belted motors and motors with normal torque characteristics. Motors built for especially low speeds or high torques may require more running current, in which case the nameplate current rating should be used.

For 90 and 80 per cent P.F. the above figures should be multiplied by 1.1 and 1.25 respectively.

CODE TABLES (continued)

Table 4—Dimensions and Per Cent Area of Conduit and of Tubing
Areas of Conduit or Tubing for the Combinations of Wires Permitted in Table 3

Trade Size	Internal Diameter Inches	Area—Square Inches									
		Total 100%	Not Lead Covered				Lead Covered				
			1 Cond. 53%	2 Cond. 31%	3 Cond. 43%	4 Cond. and Over 40%	1 Cond. 55%	2 Cond. 30%	3 Cond. 40%	4 Cond. 38%	Over 4 Cond. 35%
½	.622	.30	.16	.09	.13	.12	.17	.09	.12	.11	.11
¾	.824	.53	.28	.16	.23	.21	.29	.16	.21	.20	.19
1	1.049	.86	.46	.27	.37	.34	.47	.26	.34	.33	.30
1½	1.380	1.50	.80	.47	.65	.60	.83	.45	.60	.57	.53
2	1.610	2.04	1.08	.63	.88	.82	1.12	.61	.82	.78	.71
2½	2.067	3.36	1.78	1.04	1.44	1.34	1.85	1.01	1.34	1.28	1.18
3	2.469	4.79	2.54	1.48	2.06	1.92	2.63	1.44	1.92	1.82	1.68
3½	3.068	7.38	3.91	2.29	3.17	2.95	4.06	2.21	2.95	2.80	2.58
4	3.548	9.90	5.25	3.07	4.26	3.96	5.44	2.97	3.96	3.76	3.47
4½	4.026	12.72	6.74	3.94	5.47	5.09	7.00	3.82	5.09	4.83	4.45
5	5.047	20.00	10.60	6.20	8.60	8.00	11.00	6.00	8.00	7.60	7.00
6	6.065	28.89	15.31	8.96	12.42	11.56	15.89	8.67	11.56	10.98	10.11

Table 5—Dimensions of Rubber-Covered and Thermoplastic-Covered Conductors

Size AWG MCM	Types RF-2, RFH-2, R, RH, RHH, RHW, RH-RW, RW THW		Types TF, T, TW, RU**, RUH**, RUW	
	Approx. Diam. Inches	Approx. Area Sq. Ins.	Approx. Diam. Inches	Approx. Area Sq. Ins.
18	.146	.0167	.106	.0088
16	.158	.0196	.118	.0109
14	2/64 in. .171	.0230	.131	.0135
12	3/64 in. .204*	.0327*		
12	2/64 in. .188	.0278	.148	.0172
10	3/64 in. .221*	.0384*		
10	.242	.0460	.168	.0224
8	.311	.0760	.228	.0408
6	.397	.1238	.323	.0819
4	.452	.1605	.372	.1087
3	.481	.1817	.401	.1263
2	.513	.2067	.433	.1473
1	.588	.2715	.508	.2027
0	.629	.3107	.549	.2367
00	.675	.3578	.595	.2781
000	.727	.4151	.647	.3288
0000	.785	.4840	.705	.3904
250	.868	.5917	.788	.4877
300	.933	.6837	.843	.5581
350	.985	.7620	.895	.6291
400	1.032	.8365	.942	.6969
500	1.119	.9834	1.029	.8316
600	1.233	1.1940	1.143	1.0261
700	1.304	1.3355	1.214	1.1575
750	1.339	1.4082	1.249	1.2252
800	1.372	1.4784	1.282	1.2908
900	1.435	1.6173	1.345	1.4208
1000	1.494	1.7531	1.404	1.5482
1250	1.676	2.2062	1.577	1.9532
1500	1.801	2.5475	1.702	2.2748
1750	1.916	2.8895	1.817	2.5930
2000	2.021	3.2079	1.922	2.9013

*The dimensions of Type RW, RHH and THW wire. Also, these dimensions to be used for new work in computing size of conduit or tubing for combinations of wires not shown in Table 1.

**No. 14 to No. 2.

No. 18 to No. 8, solid; No. 6 and larger, stranded.

The dimensions of rubber-covered conductors in column 3 of this table are to be used in computing the size of conduit or tubing for new work for combinations not shown in Table 1. The dimensions in the last column of this table may be used only for rewiring existing raceways.

Note: The above tables give the nominal size of conductors and conduit or tubing recommended for use in computing size of conduit or tubing for various combinations of conductors. The dimensions represent average conditions only, and while variations will be found in dimensions of conductors and conduits of different manufacture, these variations will not affect the computation.

Table 6—Dimensions of Lead-Covered Conductors
Types RL, RHL, and RUL

Size AWG MCM	Single Conductor		Two Conductor		Three Conductor	
	Diam. Inches	Area Sq. Ins.	Diam. Inches	Area Sq. Ins.	Diam. Inches	Area Sq. Ins.
14	.28	.062	.28 x .47	.115	.59	.273
12	.29	.066	.31 x .54	.146	.62	.301
10	.35	.096	.35 x .59	.180	.68	.363
8	.41	.132	.41 x .71	.255	.82	.528
6	.49	.188	.49 x .86	.369	.97	.738
4	.55	.237	.54 x .96	.457	1.08	.916
2	.60	.283	.61 x 1.08	.578	1.21	1.146
1	.67	.352	.70 x 1.23	.756	1.38	1.49
0	.71	.396	.74 x 1.32	.859	1.47	1.70
00	.76	.454	.79 x 1.41	.980	1.57	1.94
000	.81	.515	.84 x 1.52	1.123	1.69	2.24
0000	.87	.593	.90 x 1.64	1.302	1.85	2.68
250	.98	.754	.....	.....	2.02	3.20
300	1.04	.85	.....	.....	2.15	3.62
350	1.10	.95	.....	.....	2.26	4.02
400	1.14	1.02	.....	.....	2.40	4.52
500	1.23	1.18	.....	.....	2.59	5.28

Note—No. 14 to No. 8, solid conductors; No. 6 and larger, stranded conductors. Data for 2/64-inch insulation not yet compiled.

Varnished-Cambric Insulated Conductors

Type V

The insulation thickness for varnished-cambric conductors, Type V, is the same as for rubber-covered conductors, Type R, except for Nos. 14 and 12 which have 3/64-inch insulation for varnished-cambric, and 2/64-inch insulation for rubber-covered conductors and for No. 8 which has 3/64-inch insulation for varnished-cambric, and 4/64-inch insulation for rubber-covered conductors. Tables 1 and 2 may, therefore, be used for the number of varnished-cambric insulated conductors in a conduit or tubing.

CODE TABLES (continued)

Table 430-152. Maximum Rating or Setting of Motor-Branch-Circuit Protective Devices for Motors Marked with a Code Letter Indicating Locked Rotor KVA

Type of Motor	Per Cent of Full-Load Current	
	Fuse Rating (See also Table 430-146, Columns 4, 5, 6, 7)	Circuit-Breaker Setting Instantaneous Type Time Limit Type
All AC single-phase and polyphase squirrel cage and synchronous motors with full-voltage, resistor or reactor starting:		
Code Letter A	150	150
Code Letter B to E	250	200
Code Letter F to V	300	250
All AC squirrel cage and synchronous motors with auto-transformer starting:		
Code Letter A	150	150
Code Letter B to E	200	200
Code Letter F to V	250	200

Synchronous motors of the low-torque, low-speed type (usually 450 RPM or lower), such as are used to drive reciprocating compressors, pumps, etc., which start up unloaded, do not require a fuse rating or circuit-breaker setting in excess of 200 per cent of full-load current.

Table 430-153. Maximum Rating or Setting of Motor-Branch-Circuit Protective Devices for Motors not Marked with a Code Letter Indicating Locked Rotor KVA

Type of Motor	Per Cent of Full-Load Current	
	Fuse Rating (See also Table 430-146, Columns 4, 5, 6, 7)	Circuit-Breaker Setting Instantaneous Type Time Limit Type
1-phase, all types	300	250
Squirrel-cage and synchronous (full-voltage, resistor and reactor starting)	300	250
Squirrel-cage and synchronous (auto-transformer starting)		
Not more than 30 amperes	250	200
More than 30 amperes	200	200
High-reactance squirrel-cage Not more than 30 amperes	250	250
More than 30 amperes	200	200
Wound-rotor	150	150
Direct-current		
Not more than 50 H.P.	150	150
More than 50 H.P.	150	150

Table 430-7(b). Locked Rotor Indicating Code Letters

Code Letter	Kilovolt-Amperes per Horsepower with Locked Rotor	
A	0	3.14
B	3.15	3.54
C	3.55	3.99
D	4.0	4.49
E	4.5	4.99
F	5.0	5.59
G	5.6	6.29
H	6.3	7.09
J	7.1	7.99
K	8.0	8.99
L	9.0	9.99
M	10.0	11.19
N	11.2	12.49
P	12.5	13.99
R	14.0	15.99
S	16.0	17.99
T	18.0	19.99
U	20.0	22.39
V	22.4	and up

The above table is an adopted standard of the National Electrical Manufacturers Association.

The code letter indicating motor input with locked rotor must be in an individual block on the nameplate, properly designated. This code letter is to be used for determining branch circuit overcurrent protection by reference to Table 430-152.

Table 710-37: Isolation by Elevation

Distance of Live Parts Above the Floor or Other Working Surface

Voltage Between Phases	Minimum Vertical Clearance of Unguarded Parts	
	Feet	Inches
601	8	0
2300	8	0
6600	8	0
11000	9	0
22000	9	3
33000	9	6
44000	9	10
66000	10	5
88000	11	0
110000	11	7
132000	12	2

Table 710-38: Working Space

Minimum Clear Space Adjacent to Live Parts

Voltage Between Phases	Minimum Horizontal Clearance of Unguarded Parts	
	Feet	Inches
601	3	2
2300	3	3
6600	3	4
11000	3	6
22000	3	9
33000	4	0
44000	4	4
66000	4	11
88000	5	6
110000	6	1
132000	6	8

MAXIMUM NUMBER OF CONDUCTORS IN BOXES

Table 370-6(a-1): Deep Boxes

Box Dimensions Trade Size	Maximum Number of Conductors			
	No. 14	No. 12	No. 10	No. 8
1 1/2 x 3 1/4 octagonal	5	5	4	0
1 1/2 x 4 octagonal	8	7	6	5
1 1/4 x 4 square	9	7	6	4
1 1/2 x 4 square	11	9	7	5
1 1/2 x 4 11/16 square	16	12	10	8
2 1/8 x 4 11/16 square	20	16	12	10
2 x 1 3/4 x 2 3/4	5	4	4	4
2 1/2 x 1 3/4 x 2 3/4	6	6	5	5
3 x 1 3/4 x 2 3/4	7	7	6	6

Where there is not sufficient space for a deeper box, four No. 14 AWG conductors may enter a box provided with cable clamps and containing one or more devices on a single mounting strap.

Table 370-6(a-2): Shallow Boxes (Less than 1 1/2" Depth)

Box Dimensions Trade Size	Maximum Number of Conductors		
	No. 14	No. 12	No. 10
3 1/4	4	4	3
4	6	6	4
4 11/16	8	6	6

The above tables apply where no fittings or devices, such as fixture studs, cable clamps, hickey, switches or receptacles are contained in the box. Where one or more fixture studs, cable clamps, or hickey are contained in the box, the number of conductors shall be one less than shown in the tables with a further deduction of one conductor for one or several flush devices mounted on the same strap. A conductor running through the box is counted as one conductor and each conductor originating outside the box and terminating inside the box is counted as one conductor. Conductors of which no part leaves the box are not to be counted in the above computation. If single flush boxes are ganged, and each section is occupied by a flush device or combination of flush devices on the same strap, the limitations will apply to each section individually.

Table 370-6(b): Other Combinations

Size of Conductor	Free Space Within Box for Each Conductor
No. 14	2. cubic inches
No. 12	2.25 cubic inches
No. 10	2.5 cubic inches
No. 8	3. cubic inches

CODE TABLES (continued)

PROTECTIVE DEVICES FOR RUNNING OVERLOAD PROTECTION AND BRANCH CIRCUIT PROTECTION

(Based on Rated Full-load Motor Current)
Table 430-146

Col. No. 1	2		4				7			
	For Running Protection of Motors		Maximum Allowable Rating or Setting of Branch Circuit Protective Devices				WITH CODE LETTERS			
Full load current rating of motor amperes	Maximum rating of non-adjustable protective devices.	Maximum setting of adjustable protective devices.	WITH CODE LETTERS		WITHOUT CODE LETTERS		WITH CODE LETTERS		WITHOUT CODE LETTERS	
			Single-phase squirrel cage and synchronous. Full voltage, resistor or reactor starting. Code letters F to V inclusive.	Same as above.	Single-phase, squirrel cage and synchronous. Full voltage, resistor or reactor start. Code letters B to E inclusive. Auto transformer start. Code letters F to V inclusive.	Same as above.	Squirrel cage and synchronous auto transformer start. Code letters B to E inclusive.	Same as above.	All motors code letter A.	DC and wound rotor motors.
	Amperes	Amperes	Fuses	Circuit Breakers (Non-adjustable Overload Trip)	Fuses	Circuit Breakers (Non-adjustable Overload Trip)	Fuses	Circuit Breakers (Non-adjustable Overload Trip)	Fuses	Circuit Breakers (Non-adjustable Overload Trip)
1	2	1.25	15	15	15	15	15	15	15	15
2	3	2.50	15	15	15	15	15	15	15	15
3	4	3.75	15	15	15	15	15	15	15	15
4	6	5.0	15	15	15	15	15	15	15	15
5	8	6.25	15	15	15	15	15	15	15	15
6	10	7.50	20	20	20	20	15	15	15	15
7	10	8.75	25	20	20	15	15	15	15	15
8	10	10.0	25	20	20	20	20	20	15	15
9	12	11.25	30	30	25	20	20	20	15	15
10	12	12.50	30	30	25	20	20	20	15	15
11	15	13.75	35	30	30	30	25	30	20	20
12	15	15.00	40	30	30	30	25	30	20	20
13	20	16.25	40	40	35	30	30	30	20	20
14	20	17.50	45	40	35	30	30	30	25	30
15	20	18.75	45	40	40	30	30	30	25	30
16	25	20.00	50	40	40	40	35	40	30	30
17	25	21.25	60	50	45	40	35	40	30	30
18	25	22.50	60	50	45	40	40	40	30	30
19	25	23.75	60	50	50	40	40	40	30	30
20	25	25.00	60	50	50	40	40	40	30	30
22	30	27.50	70	70	60	50	45	50	40	40
24	30	30.00	80	70	60	50	50	50	40	40
26	35	32.50	80	70	70	70	60	70	40	40
28	35	35.00	90	70	70	70	60	70	45	50
30	40	37.50	90	100	80	70	60	70	45	50
32	40	40.00	100	100	80	70	70	70	50	50
34	45	42.50	110	100	90	70	70	70	60	70
36	45	45.00	110	100	90	100	80	100	60	70
38	50	47.50	125	100	100	100	80	100	60	70
40	50	50.00	125	100	100	100	80	100	60	70
42	50	52.50	125	100	110	100	80	100	70	70
44	60	55.00	125	125	110	100	90	100	70	70
46	60	57.50	150	125	125	100	100	100	70	70
48	60	60.00	150	125	125	100	100	100	80	100
50	60	62.50	150	125	125	100	100	100	80	100
52	60	65.00	175	150	150	125	110	125	90	100
54	70	67.50	175	150	150	125	110	125	90	100
56	70	70.00	175	150	150	125	125	125	90	100
58	70	72.50	175	150	150	125	125	125	90	100
60	80	75.00	200	150	150	125	125	125	90	100
62	80	77.50	200	175	175	150	125	125	100	100
64	80	80.00	200	175	175	150	150	150	100	100
66	80	82.50	200	175	175	150	150	150	100	100
68	90	85.00	225	175	175	150	150	150	110	125
70	90	87.50	225	175	175	150	150	150	110	125
72	90	90.00	225	200	200	150	150	150	125	125
74	90	92.50	225	200	200	150	150	150	125	125
76	100	95.00	250	200	200	175	175	175	125	125
78	100	97.50	250	200	200	175	175	175	125	125
80	100	100.00	250	200	200	175	175	175	125	125
82	110	102.50	250	225	225	175	175	175	125	125
84	110	105.00	250	225	225	175	175	175	150	150
86	110	107.50	300	225	225	175	175	175	150	150
88	110	110.00	300	225	225	200	200	200	150	150
90	110	112.50	300	225	225	200	200	200	150	150
92	125	115.00	300	250	250	200	200	200	150	150
94	125	117.50	300	250	250	200	200	200	150	150
96	125	120.00	300	250	250	200	200	200	150	150
98	125	122.50	300	250	250	200	200	200	150	150
100	125	125.00	300	250	250	200	200	200	150	150
105	150	131.25	350	300	300	225	225	225	175	175
110	150	137.50	350	300	300	225	225	225	175	175
115	150	144.00	350	300	300	250	250	250	175	175
120	150	150.00	400	300	300	250	250	250	200	200
125	175	156.25	400	350	350	250	250	250	200	200
130	175	162.50	400	350	350	300	300	300	200	200
135	175	168.00	450	350	350	300	300	300	225	225
140	175	175.00	450	350	350	300	300	300	225	225
145	200	181.25	450	400	400	300	300	300	225	225
150	200	187.50	450	400	400	300	300	300	225	225
155	200	194.00	500	400	400	350	350	350	250	250
160	200	200.00	500	400	400	350	350	350	250	250
165	225	206.00	500	500	450	350	350	350	250	250
170	225	213.00	500	500	450	350	350	350	300	300
175	225	219.00	600	500	450	350	350	350	300	300
180	250	225.00	600	500	500	400	400	400	300	300
185	250	231.00	600	500	500	400	400	400	300	300
190	250	238.00	600	500	500	400	400	400	300	300
195	250	244.00	600	500	500	400	400	400	300	300
200	250	250.00	600	500	500	400	400	400	300	300
210	250	261.00	600	600	600	450	450	450	350	350
220	300	275.00	600	600	600	500	500	500	350	350
230	300	288.00	800	600	600	500	500	500	350	350
240	300	300.00	800	600	600	500	500	500	400	400
250	300	313.00	800	700	800	500	500	500	400	400
260	350	325.00	800	700	800	600	600	600	400	400
270	350	338.00	1000	700	800	600	600	600	450	500
280	350	350.00	1000	700	800	600	600	600	450	500

CODE TABLES (continued)

ALLOWABLE CURRENT-CARRYING CAPACITIES OF INSULATED CONDUCTORS (Amperes)

Not More Than Three Conductors in Raceway or Cable or Direct Burial
(Based on Room Temperature of 30C, 86F)

TABLE 310-12: COPPER

Size AWG MCM	Rubber Type R Type RW Type RUW (14-2) Type RH-RW* Thermo- plastic Type T Type TW	Rubber Type RH RUH (14-2) Type RH-RW* Type RHW Thermo- plastic Type THW	Paper Thermo- plastic Asbestos Type TA Var-Com Type V Asbestos Var-Com Type AVA Type AVL MI Cable RHH† SA	Asbestos Var-Com Type AVA Type AVL	Impreg- nated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA
14	15	15	25	30	30	30
12	20	20	30	35	40	40
10	30	30	40	45	50	55
8	40	45	50	60	65	70
6	55	65	70	80	85	95
4	70	85	90	105	115	120
3	80	100	105	120	130	145
2	95	115	120	135	145	165
1	110	130	140	160	170	190
0	125	150	155	190	200	225
00	145	175	185	215	230	250
000	165	200	210	245	265	285
0000	195	230	235	275	310	340
250	215	255	270	315	335	.....
300	240	285	300	345	380	.....
350	260	310	325	390	420	.....
400	280	335	360	420	450	.....
500	320	380	405	470	500	.....
600	355	420	455	525	545	.....
700	385	460	490	560	600	.....
750	400	475	500	580	620	.....
800	410	490	515	600	640	.....
900	435	520	555	.....	.....	.....
1000	455	545	585	680	730	.....
1250	495	590	645	.....	.....	.....
1500	520	625	700	785	.....	.....
1750	545	650	735	.....	.....	.....
2000	560	665	775	840	.....	.....

CORRECTION FACTORS, ROOM TEMPS. OVER 30°C, 86°F.

C.	F.	.82	.88	.90	.94	.95	.....
40	104	.....	.....	.....	.....	.....	.....
45	113	.71	.82	.85	.90	.92	.....
50	122	.58	.75	.80	.87	.89	.....
55	131	.41	.67	.74	.83	.86	.....
60	140	.....	.58	.67	.79	.83	.91
70	158	.....	.35	.52	.71	.76	.87
75	167	.....	.....	.43	.66	.72	.86
80	176	.....	.....	.....	.30	.69	.84
90	194	.....	.....	.....	.....	.50	.80
100	212	.....	.....	.....	.....	.....	.77
120	248	.....	.....	.....	.....	.....	.69
140	284	.....	.....	.....	.....	.....	.59

†The current-carrying capacities for Type RHH conductors for sizes AWG 14, 12 and 10 shall be the same as designated for Type RH conductors in this table.
* See Note 8a.

TABLE 310-14: ALUMINUM

Size AWG MCM	Rubber Type R, RW, RU, RUW (12-2) Type RH-RW** Thermo- plastic Type T, TW	Rubber Type RH RUH (14-2) Type RH-RW** Type RHW Thermo- plastic Type THW	Thermo- plastic Asbestos Type TA Var-Com Type V Asbestos Var-Com Type AVB MI Cable RHH† SA	Asbestos Var-Com Type AVA Type AVL	Impreg- nated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA
12	15	15	25	25	30	30
10	25	25	30	35	40	45
8	30	30	40	45	50	55
6	40	50	55	60	65	75
4	55	65	70	80	90	95
3	65	75	80	95	100	115
*2	75	90	95	105	115	130
*1	85	100	110	125	135	150
*0	100	120	125	150	160	180
*00	115	135	145	170	180	200
*000	130	155	165	195	210	225
*0000	155	180	185	215	245	270
250	170	205	215	250	270	.....
300	190	230	240	275	305	.....
350	210	250	260	310	335	.....
400	225	270	290	335	360	.....
500	260	310	330	380	405	.....
600	285	340	370	425	440	.....
700	310	375	395	455	485	.....
750	320	385	405	470	500	.....
800	330	395	415	485	520	.....
900	355	425	455	560	600	.....
1000	375	445	480	560	600	.....
1250	405	485	530	.....	.....	.....
1500	435	520	580	650	.....	.....
1750	455	545	615	705	.....	.....
2000	470	560	650	705	.....	.....

CORRECTION FACTORS, ROOM TEMPS. OVER 30°C, 86°F.

C.	F.	.82	.88	.90	.94	.95	.....
40	104	.....	.....	.....	.....	.....	.....
45	113	.71	.82	.85	.90	.92	.....
50	122	.58	.75	.80	.87	.89	.....
55	131	.41	.67	.74	.83	.86	.....
60	140	.....	.58	.67	.79	.83	.91
70	158	.....	.35	.52	.71	.76	.87
75	167	.....	.....	.43	.66	.72	.86
80	176	.....	.....	.....	.30	.69	.84
90	194	.....	.....	.....	.....	.50	.80
100	212	.....	.....	.....	.....	.....	.77
120	248	.....	.....	.....	.....	.....	.69
140	284	.....	.....	.....	.....	.....	.59

*For three wire, single phase service and sub-service circuits, the allowable current-carrying capacity of RH, RH-RW, RHW and RHH aluminum conductors shall be for sizes #2-100 Amp., #1-110 Amp., #1/0-125 Amp., #2/0-150 Amp., #3/0-170 Amp., and #4/0-200 Amp.
†The current-carrying capacities for Type RHH conductors for sizes AWG 12, 10 and 8 shall be the same as designated for Type RH conductors in this table.
**See Note 8a.

NOTES TO TABLES

4. Bare Conductors. Where bare conductors are used with insulated conductors, their allowable current-carrying capacity shall be limited to that permitted for the insulated conductors of the same size.

5. Type MI Cable. The temperature limitation on which the current carrying capacities of Type MI cable are based, is determined by the insulating materials used in the end seal. Termination fittings incorporating unimpregnated organic insulating materials are limited to 85°C operation.

7. Use of Conductors With Higher Operating Temperatures. Where the room temperature is within 10 degrees C. of the maximum allowable operating temperature of the insulation, it is desirable to use an insulation with a higher maximum allowable operating temperature, although insulation can be used in a room temperature approaching its maximum allowable operating temperature limit if the current is reduced in accordance with the Correction Factors for different room temperatures.

8. More Than Three Conductors in a Raceway. Tables 310-12 and 310-14 give the allowable current-carrying capacities for not more than three conductors in a raceway or cable. Where the number of conductors in a raceway or cable exceeds three, the allowable current-carrying capacity of each conductor shall be reduced as shown in the following Table:

Number of Conductors	Per Cent of Tabular Values
4 to 6	80
7 to 24	70
25 to 42	60
43 and above	50

Exception—When conductors of different systems, as provided in Section 300-3, are installed in a common raceway the derating factors shown above apply to the number of Power and Lighting (Articles 210, 220 and 230) conductors only.

8. (a) Where Type RH-RW rubber insulated wire is used in wet locations the allowable current carrying capacities shall be that of Column 2 in Tables 310-12 through 310-15. Where used in dry locations the allowable current carrying capacities shall be that of Column 3 in Tables 310-12 through 310-15.

9. Overcurrent Protection. Where the standard ratings and settings of overcurrent devices do not correspond with the ratings and settings allowed for conductors, the next higher standard rating and setting may be used.

10. Neutral Conductor. A neutral conductor which carries only the unbalanced current from other conductors, as in the case of normally balanced circuits of three or more conductors, shall not be counted in determining current-carrying capacities as provided for in Paragraph 8 of these notes.

In a 3-wire circuit consisting of two phase wires and the neutral of a 4-wire, 3-phase system, a common conductor carries approximately the same current as the other conductors and is not therefore considered as a neutral conductor.

11. Voltage Drop. The allowable current-carrying capacities in Tables 310-12 through 310-15 are based on temperature alone and do not take voltage drop into consideration.

12. Deterioration of Insulation. It should be noted that even the best grades of rubber insulation will deteriorate in time, so eventually will need to be replaced.

DC CIRCUIT CHARACTERISTICS

Ohm's Law:

$$E = IR \quad I = \frac{E}{R} \quad R = \frac{E}{I}$$

E = voltage impressed on circuit (volts)

I = current flowing in circuit (amperes)

R = circuit resistance (ohms)

In direct current circuits, electrical power is equal to the product of the voltage and current:

$$P = EI = I^2 R = \frac{E^2}{R}$$

P = power (watts)

E = voltage (volts)

I = current (amperes)

R = resistance (ohms)

AC CIRCUIT CHARACTERISTICS

The instantaneous values of an alternating current or voltage vary from zero to a maximum value each half cycle. In the practical formulae which follow, the "effective value" of current and voltage is used, defined as follows:

Effective value = 0.707 × maximum instantaneous value

Impedance:

Impedance is the total opposition to the flow of alternating current. It is a function of resistance, capacitive reactance and inductive reactance. The following formulae relate these circuit properties:

$$X_L = 2\pi fL \quad X_C = \frac{1}{2\pi fC} \quad Z = \sqrt{R^2 + (X_L - X_C)^2}$$

X_L = inductive reactance (ohms)

X_C = capacitive reactance (ohms)

Z = impedance (ohms)

f = frequency (cycles per second)

C = capacitance (farads)

L = inductance (henrys)

R = resistance (ohms)

$\pi = 3.14$

Ohm's Law for AC Circuits:

$$E = I \times Z \quad I = \frac{E}{Z} \quad Z = \frac{E}{I}$$

POWER FACTOR

Power factor of a circuit or system is the ratio of actual power (watts) to apparent power (volt-amperes), and is equal to the cosine of the phase angle of the circuit:

$$PF = \frac{\text{actual power}}{\text{apparent power}} = \frac{\text{watts}}{\text{volts} \times \text{amperes}} = \frac{KW}{KVA} = \frac{R}{Z}$$

KW = kilowatts

KVA = kilovolt-amperes = volt-amperes × 1,000

PF = power factor (expressed as decimal)

SINGLE-PHASE CIRCUITS

$$KVA = \frac{EI}{1,000} = \frac{KW}{PF} \quad KW = KVA \times PF$$

$$I = \frac{P}{E \times PF} \quad E = \frac{P}{I \times PF} \quad PF = \frac{P}{E \times I}$$

P = E × I × PF

P = power (watts)

THREE-PHASE CIRCUITS, BALANCED STAR OR WYE

$$I_N = 0 \quad I = I_p \quad E = \sqrt{3} E_p = 1.73 E_p$$

$$E_p = \frac{E}{\sqrt{3}} = \frac{E}{1.73} = 0.577 E$$

I_N = current in neutral (amperes)

I = line current per phase (amperes)

I_p = current in each phase winding (amperes)

E = voltage, phase to phase (volts)

E_p = voltage, phase to neutral (volts)

THREE-PHASE CIRCUITS, BALANCED DELTA

$$I = 1.732 \times I_p \quad I_p = \frac{I}{\sqrt{3}} = 0.577 \times I$$

E = E_p

POWER: BALANCED 3-WIRE, 3-PHASE CIRCUIT, DELTA OR WYE

For unity power factor (PF = 1.0):

$$P = 1.732 \times E \times I$$

$$I = \frac{P}{\sqrt{3} E} = \frac{0.577 P}{E} \quad E = \frac{P}{\sqrt{3} \times I} = \frac{0.577 P}{I}$$

P = total power (watts)

For any load:

$$P = 1.732 \times E \times I \times PF \quad VA = 1.732 \times E \times I$$

$$E = \frac{P}{PF \times 1.73 \times I} = \frac{0.577 \times P}{PF \times I}$$

$$I = \frac{P}{PF \times 1.73 \times E} = \frac{0.577 \times P}{PF \times E}$$

$$PF = \frac{P}{1.73 \times I \times E} = \frac{0.577 \times P}{I \times E}$$

VA = apparent power (volt-amperes)

P = actual power (watts)

E = line voltage (volts) phase to phase

I = line current (amperes)

POWER LOSS: ANY AC OR DC CIRCUIT

$$P = I^2 R \quad I = \sqrt{\frac{P}{R}} \quad R = \frac{P}{I^2}$$

P = power heat loss in circuit (watts)

I = effective current in conductor (amperes)

R = conductor resistance (ohms)

CONVERSION TABLES

KILOWATTS TO HORSEPOWER					
kw	hp	kw	hp	kw	hp
1	1.341	30	40.218	130	174.28
2	2.681	32	42.899	140	187.48
3	4.022	34	45.580	150	201.09
4	5.363	36	48.261	160	214.50
5	6.703	38	50.943	170	227.90
6	8.044	40	53.624	180	241.31
7	9.384	42	56.305	190	254.71
8	10.725	44	58.986	200	268.12
9	12.065	46	61.667	220	294.93
10	13.406	48	64.349	240	321.74
11	14.747	50	67.030	260	348.56
12	16.087	55	73.733	280	375.37
13	17.428	60	80.436	300	402.18
14	17.768	65	87.139	325	435.69
15	20.109	70	93.842	350	469.21
16	21.450	75	100.545	400	536.24
17	22.790	80	107.248	450	603.27
18	24.131	85	113.951	500	670.30
19	25.471	90	120.654	600	804.36
20	26.812	95	127.357	700	938.42
24	32.174	100	134.048	800	1072.48
26	34.856	110	147.47	900	1206.54
28	37.537	120	160.87	1000	1340.40

HORSEPOWER TO KILOWATTS					
hp	kw	hp	kw	hp	kw
1	.746	30	22.380	130	96.98
2	1.492	32	23.872	140	104.44
3	2.238	34	25.364	150	111.90
4	2.984	36	26.856	160	119.36
5	3.730	38	28.348	170	126.82
6	4.476	40	29.840	180	134.28
7	5.222	42	31.332	190	141.74
8	5.968	44	32.824	200	149.20
9	6.714	46	34.316	220	164.12
10	7.460	48	35.808	240	179.04
11	8.206	50	37.300	260	193.96
12	8.952	55	41.03	280	208.88
13	9.698	60	44.76	300	223.80
14	10.444	65	48.49	325	242.45
15	11.190	70	52.22	350	261.1
16	11.936	75	55.95	400	298.4
17	12.682	80	59.68	450	335.7
18	13.428	85	63.41	500	373.0
19	14.174	90	67.14	600	447.6
20	14.920	95	70.87	700	522.2
24	17.904	100	74.60	800	596.8
26	19.396	110	82.06	900	671.4
28	20.888	120	89.52	1000	746.0

Note: Conversions not given may be obtained by adding appropriate given values.

DECIMAL EQUIVALENTS			
Fraction	Decimal	Fraction	Decimal
1/64 =	0.015625	33/64 =	0.515625
1/32 =	0.031250	17/32 =	0.531250
3/64 =	0.046875	35/64 =	0.546875
1/16 =	0.062500	9/16 =	0.562500
5/64 =	0.078125	37/64 =	0.578125
3/32 =	0.093750	19/32 =	0.593750
7/64 =	0.109375	39/64 =	0.609375
1/8 =	0.125000	5/8 =	0.625000
9/64 =	0.140625	41/64 =	0.640625
5/32 =	0.156250	21/32 =	0.656250
11/64 =	0.171875	43/64 =	0.671875
3/16 =	0.187500	11/16 =	0.687500
13/64 =	0.203125	45/64 =	0.703125
7/32 =	0.218750	23/32 =	0.718750
15/64 =	0.234375	47/64 =	0.734375
1/4 =	0.250000	3/4 =	0.750000
17/64 =	0.265625	49/64 =	0.765625
9/32 =	0.281250	25/32 =	0.781250
19/64 =	0.296875	51/64 =	0.796875
5/16 =	0.312500	13/16 =	0.812500
21/64 =	0.328125	53/64 =	0.828125
11/32 =	0.343750	27/32 =	0.843750
23/64 =	0.359375	55/64 =	0.859375
3/8 =	0.375000	7/8 =	0.875000
25/64 =	0.390625	57/64 =	0.890625
13/32 =	0.406250	29/32 =	0.906250
27/64 =	0.421875	59/64 =	0.921875
7/16 =	0.437500	15/16 =	0.937500
29/64 =	0.453125	61/64 =	0.953125
15/32 =	0.468750	31/32 =	0.968750
31/64 =	0.484375	63/64 =	0.984375
1/2 =	0.500000		

TEMPERATURE			
Centigrade	Fahrenheit	Centigrade	Fahrenheit
-18	-0.4	52	125.6
-16	3.2	54	129.2
-14	6.8	56	132.8
-12	10.4	58	136.4
-10	14.0	60	140.0
-8	17.6	62	143.6
-6	21.2	64	147.2
-4	24.8	66	150.8
-2	28.4	68	154.4
0	32.0	70	158.0
2	35.6	72	161.6
4	39.2	74	165.2
6	42.8	76	168.8
8	46.4	78	172.4
10	50.0	80	176.0
12	53.6	82	179.6
14	57.2	84	183.2
16	60.8	86	186.8
18	64.4	88	190.4
20	68.0	90	194.0
22	71.6	92	197.6
24	75.2	94	201.2
26	78.8	96	204.8
28	82.4	98	208.4
30	86.0	**100	212.0
32	89.6	102	215.6
34	93.2	104	219.2
36	96.8	106	222.8
38	100.4	108	226.4
40	104.0	110	230.0
42	107.6	112	233.6
44	111.2	114	237.2
46	114.8	116	240.8
48	118.4	118	244.4
50	122.0	120	248.0

*Freezing

**Boiling

$$\text{Conversion Method } F = \frac{9}{5}C + 32$$

$$C = \frac{5}{9}(F - 32)$$

CONVERSION FACTORS (continued)

These units	multiplied by	equal	These units	multiplied by	equal
amperes per square cm.	6.452	amperes per sq. inch.	ergs per second	1.341×10^{-10}	horse-power.
ampere-turns	1.257	gilberts.		10^{-10}	kilowatts.
ampere-turns per cm.	2.540	ampere-turns per inch.	feet of water	62.43	pounds per square foot.
British thermal units	778.3	foot pounds.		0.4335	pounds per square inch.
	3.931×10^{-4}	horse-power-hours.	feet per minute	0.01667	feet per second.
	1055	joules.		0.01136	miles per hour.
	2.930×10^{-4}	kilowatt hours.	feet per second	0.5921	knots.
B.t.u. per min.	12.97	foot-pounds per sec.		0.6818	miles per hour.
	0.02357	horse-power.		0.01136	miles per minute.
	0.01758	kilowatts.	feet per second per second	0.6818	miles per hour per sec.
	17.58	watts.	foot-pounds	1.285×10^{-3}	British thermal units.
B.t.u. per sq. ft. per min.	0.1221	watts per square inch.		1.356×10^{-7}	ergs.
centimeters	3.281×10^{-2}	feet.		5.050×10^{-7}	horse-power-hours.
	0.3937	inches.		1.356	joules.
	6.214×10^{-4}	miles.		3.766×10^{-7}	kilowatt-hours.
	393.7	mils.	foot-pounds per minute	1.285×10^{-3}	B.t. units per minute.
	1.094×10^{-2}	yards.		0.01667	foot pounds per second.
centimeter-dynes	7.376×10^{-8}	pound-feet.		3.030×10^{-4}	horse-power.
centimeter-grams	7.233×10^{-5}	pound-feet.		2.260×10^{-5}	kilowatts.
centimeters per second	1.969	feet per minute.	foot-pounds per second	7.709×10^{-3}	B.t. units per minute.
	0.03281	feet per second.		1.818×10^{-3}	horse-power.
	0.02237	miles per hour.		1.356×10^{-3}	kilowatts.
	3.728×10^{-4}	miles per minute.	gallons	0.1337	cubic feet.
cms. per sec. per sec.	0.03281	feet per sec. per sec.		231	cubic inches.
circular mils	7.854×10^{-7}	square inches.	gallons per minute	2.228×10^{-3}	cubic feet per second.
	0.7854	square mils.	gausses	6.452	lines per square inch.
cubic centimeters	3.531×10^{-5}	cubic feet.	gilberts	0.7958	ampere-turns.
	6.102×10^{-2}	cubic inches.	gilberts per centimeter	2.021	ampere-turns per inch.
cubic feet	1728	cubic inches.	grams	980.7	dynes.
	0.03704	cubic yards.		15.43	grains.
	7.481	gallons.		0.03527	ounces.
	59.84	pints (liq.).		0.03215	ounces (troy).
	29.92	quarts (liq.).		2.205×10^{-3}	pounds.
cubic feet per minute	0.1247	gallons per sec.	horse-power	42.40	B.t. units per min.
	62.4	pounds of water per min.		33,000	foot-pounds per minute.
cubic inches	5.787×10^{-4}	cubic feet.		550	foot-pounds per second.
	2.143×10^{-5}	cubic yards.		1.014	horse-power (metric).
	4.329×10^{-3}	gallons.		0.7457	kilowatts.
	1.061×10^5	mil-feet.		745.7	watts.
	0.03463	pints (liq.).	horse-power (boiler)	33.520	B.t.u. per hour.
	0.01732	quarts (liq.).		9.804	kilowatts.
cubic meters	35.31	cubic feet.	horse-power-hours	2544	British thermal units.
	61,023	cubic inches.		1.98×10^6	foot-pounds.
	1,308	cubic yards.		2.684×10^6	joules.
	264.2	gdllons.		0.7455	kilowatt-hours.
	2113	pints (liq.).	inches	8.333×10^{-2}	feet.
	1057	quarts (liq.).		1.578×10^{-5}	miles.
cubic yards	27	cubic feet.		10^3	mils.
	202.0	gallons.		2.778×10^{-2}	yards.
cubic yards per minute	0.45	cubic feet per second.	inches of water	0.5781	ounces per square inch.
	3.367	gallons per second.		5.204	pounds per square foot.
degrees (angle)	60	minutes.		0.03613	pounds per square inch.
	0.01745	radians.	joules (Int.)	9.480×10^{-4}	British thermal units.
	3600	seconds.		10^7	ergs.
degrees per second	0.01745	radians per second.		0.7378	foot-pounds.
	0.1667	revolutions per minute.		2.778×10^{-4}	watt-hours.
	0.002778	revolutions per second.	kilograms	980,665	dynes.
dynes	2.248×10^{-6}	pounds.		2.205	pounds.
ergs	9.480×10^{-11}	British thermal units.		1.102×10^{-3}	tons (short).
	1	dyne-centimeters.	kilolines	10^3	maxwells.
	7.378×10^{-8}	foot-pounds.	kilowatts	56.88	B.t. units per min.
	10^{-7}	joules.		4.427×10^4	foot-pounds per min.
ergs per second	5.688×10^{-3}	B.t. units per minute.		737.8	foot-pounds per sec.
	4.427×10^{-6}	foot-pounds per minute.		1.341	horse-power.
	7.378×10^{-8}	foot-pounds per second.		10^3	watts.

CONVERSION FACTORS (continued)

These units	multiplied by	equal	These units	multiplied by	equal
kilowatt-hours	3413 2.656X10 ⁴ 1.341 3.6X10 ⁴	British thermal units. foot-pounds. horse-power-hours. joules.	quarts (dry)	67.20	cubic inches.
lines per square cm.	1	gausses.	quarts (liq.)	3.342X10 ⁻¹ 57.75	cubic feet. cubic inches.
lines per square inch	0.1550	gausses.	radians	57.30 3438 0.6366	degrees. minutes. quadrants.
lumens per sq. ft.	1	foot-candles.	radians per second	57.30 9.549 0.1592	degrees per second. revolutions per minute. revolutions per second.
maxwells	10 ⁻³	kilolines.	revolutions	360 4 6.283	degrees. quadrants. radians.
megelines	10 ⁴	maxwells.	revolutions per minute	6 0.1047 0.01667	degrees per second. radians per second. revolutions per second.
megohms	10 ⁶	ohms.	revolutions per second	360 6.283 60	degrees per second. radians per second. revs. per minute.
meters	3.281 39.37 6.214X10 ⁻⁴	feet. inches. miles.	revs. per sec. per sec.	6.283 3600 60	radians per sec. per sec. revs. per min. per min. revs. per min. per sec.
meters per minute	3.281 0.05468 0.03728	feet per minute. feet per second. miles per hour.	seconds (angle)	4.848X10 ⁻⁴	radians.
meters per second	196.8 3.281 2.237 0.03728	feet per minute. feet per second. miles per hour. miles per minute.	square centimeters	1.973X10 ³ 1.076X10 ⁻¹ 0.1550	circular mils. square feet. square inches.
microhms	10 ⁻¹² 10 ⁻⁶	megohms. ohms.	square feet	2.296X10 ⁻³ 1.833X10 ⁴ 144	acres. circular mils. square inches.
miles	5280 6.336X10 ⁴	feet. inches.	square inches	1.273X10 ⁴ 6.944X10 ⁻² 10 ⁶	circular mils. square feet. square mils.
miles per hour	88 1.467	feet per minute. feet per second.	square meters	2.471X10 ⁻⁴ 10.76 1550 3.861X10 ⁻⁷	acres. square feet. square inches. square miles.
miles per hr. per sec.	1.467	feet per sec. per sec.	square miles	640 27.88X10 ⁴ 3.098X10 ⁶	acres. square feet. square yards.
miles per minute	88 52.10 60	feet per second. knots. miles per hour.	square millimeters	1.973X10 ²	circular mils.
mil-feet	9.425X10 ⁻⁴	cubic inches.	square mils	1.273 10 ⁻⁶	circular mils. square inches.
millihenries	10 ⁻³	henries.	square yards	9 3.228X10 ⁻⁷	square feet. square miles.
millimeters	3.281X10 ⁻³ 0.03937 6.214X10 ⁻⁷ 39.37	feet. inches. miles. mils.	temp. (degs. Cent.) + 273	1	abs. temp. (degs. Cent.).
mils	8.333X10 ⁻³ 10 ⁻³	feet. inches.	temp. (degs. Cent.) + 17.8	1.8	temp. (degs. Fahr.).
minutes (angle)	2.909X10 ⁻⁴	radians.	temp. (degs. Fahr.) + 460	1	abs. temp. (degs. Fahr.).
ohms	10 ⁶ 10 ⁹	megohms. microhms.	temp. (degs. Fahr.) - 32	5/9	temp. (degs. Cent.).
ounces	0.0625	pounds.	tons (long)	2240	pounds.
ounces (troy)	480 0.08333	grains. pounds (troy).	tons (metric)	2205	pounds.
ounces per square inch	0.0625	pounds per square inch.	tons (short)	2000	pounds.
pounds	444,823 16	dynes. ounces.	tons (short) per sq. ft.	13.89	pounds per square inch.
pounds (troy)	0.8229	pounds (av.).	tons (short) per sq. in.	2000	pounds per square inch.
pounds-feet squared	144	pounds-inches squared.	watts	0.05688 10 ⁷ 44.27 0.7378 1.341X10 ⁻³ 10 ⁻³	B.t. units per min. ergs per second. foot-pounds per min. foot-pounds per second. horse-power. kilowatts.
pounds-inches squared	6.945X10 ⁻³	pounds-feet squared.	watt-hours	3.413 2656 1.341X10 ⁻³ 10 ⁻³	British thermal units. foot-pounds. horse-power-hours. kilowatt-hours.
pounds of water	0.01602 27.68 0.1198	cubic feet. cubic inches. gallons.	webers	10 ⁸	maxwells.
pounds of water per min.	2.669X10 ⁻⁴	cubic feet per sec.	yards	3 36 5.682X10 ⁻⁴	feet. inches. miles.
pounds per cubic foot	5.787X10 ⁻⁴ 5.456X10 ⁻⁹	pounds per cubic inch. pounds per mil foot.			
pounds per cubic inch	1728 9.425X10 ⁻⁴	pounds per cubic foot. pounds per mil foot.			
pounds per square foot	0.01602 6.944X10 ⁻³	feet of water. pounds per square inch.			
pounds per square inch	2.307 144	feet of water. pounds per square foot.			
quadrants (angle)	90 5400 1.571	degrees. minutes. radians.			

HOW TO DESIGN A MODERN LIGHTING SYSTEM

1. Analyze the Lighting Problem

Determine: 1) physical size and shape of the area; 2) architectural design and structural details; 3) occupancy, or end use, of the area; and 4) type and degree of severity of the seeing tasks which will exist.

2. Selected Needed Lighting Levels

Refer to chart "New Lighting Levels as Recommended by the Illuminating Engineering Society" or Fig. 9-53 in 3rd Edition of the IES Lighting Handbook.

3. Determine Desired Lighting Quality

Consider purpose for which lighting is to be used, visual environment which is desirable, methods of light control and distribution.

4. Select Proper Light Sources

Consider: 1) Efficiency (l/w); 2) total light output per lamp; 3) color (spectral) quality; 4) average rated life; 5) lumen depreciation throughout life; 6) heat produced by lamp; 7) effect of ambient temperature on light output and life; 8) light distribution control; 9) stroboscopic effect.

5. Select Appropriate Lighting System

Consider from standpoint of suitability for architectural design, general appearance, structural details, overall efficiency, ease of maintenance, method of mounting, light distribution.

6. Make a Lighting Calculation

Use appropriate method—see "Lighting Calculation Methods". Correct practice is to use the lumen method for interior lighting. Use "coefficient of utilizations" supplied by manufacturers of equipment being considered, or see Section 9 of 3rd Edition, IES Lighting Handbook.

7. Prepare a Lighting Layout

Fit the number of luminaires determined by Step 6 into the area involved in a logical and practical arrangement. (Steps 6 and 7 should be worked out simultaneously, on a "trial and error" basis.)

8. Provide Flexible Control of System

Use multiple switch control to individual multi-lamp units and multi-lamp areas, or a dimmer system for all lighting circuits.

9. Analyze Available Electrical Power

Select the most economical and appropriate electrical distribution system possible from the available electric power system.

10. Check Proposed Lighting System for Practicality

Verify all dimensions; double-check all calculations. Determine "watts/sq ft", check with normal practice. Determine impact of lighting load on air conditioning, analyze heat dissipation, check for interference with structural details and other system equipments, estimate and analyze first cost and operating cost.

HOW TO SELECT LUMINAIRES

Type of Light Source

Consider lumens per watt, size of lamps, color quality of light produced by the lamps, lamp life and replacement cost.

Type of Light Distribution

The type of lighting system and equipment layout selected will control the type of light distribution required for the luminaires or reflector equipment.

Initial Lumens Required

Light loss factors, spacing of outlets, and the desired lighting intensity maintained in service will establish light output in lumens required for each luminaire.

Overall Efficiency

Overall efficiency of luminaires varies from a high of approximately 90% downward. Consult manufacturers' light output and photometric data for luminaires under consideration.

Quality of Materials

Reflectors should have permanent type reflecting surface. Diffusing media should be durable, highly translucent, and should present an evenly lighted appearance. Gauge of metals should be adequate for necessary rigidity. Proper ventilation is important.

Ease of Maintenance

Luminaires should be easy to clean and relamp, with easily removable louvers, panels, etc. Ballasts should be readily accessible.

Appearance

Luminaires should present a good appearance and harmonize with interior and architectural treatment where used. Plain, simple lines are usually preferred.

Cost

Equipment cost is only part of the cost of good lighting. High first cost of equipment in a well designed lighting system may readily provide low cost lighting. Consider operating and maintenance costs; then select a low-cost "system".

LAYOUT REMINDERS

For the Lighting System Designer

- A customer buys a lighting system to provide an adequate, comfortable and appropriate lighting result--not because he wants luminaires, lamps, conduit and wiring.
- Luminaires and lighting equipment selected should be appropriate for the structure and the seeing problems involved. Appearance, functional design, direct and reflected glare, shadows, maintenance, and lighting efficiency are all factors to be considered.
- The lighting layout should fit the structural details of the building. If plans and drawings are not available, survey the interior and note location of columns, beams, obstructions and other architectural features.
- Use conventional layouts with symmetrical spacing of units, if possible, with luminaires parallel and perpendicular to walls. Special geometrical patterns may be suitable in some cases but should be avoided generally unless they serve a specific functional or design purpose.
- Use continuous-row fluorescent luminaires in preference to individual units. The completed installation will look better and usually results in economies in wiring and installation.
- Recessed and built-in lighting equipment does not light the ceiling. Check your layout and room surface reflectances to see that use of such equipment will not produce uncomfortably dark ceilings nor excessive brightness ratios in the normal field of view.
- Efficiency of trans-lighted ceilings is dependent to a great extent on the reflectance of the plenum cavity. Be sure lamps can be mounted sufficiently high above diffusers or louvers to provide uniform brightness and spaced properly to provide desired intensity. Paint entire cavity white with highest possible reflectance.
- Suspended luminaires of the direct-indirect type often produce the best lighting result most economically. Check the suspension length carefully and limit it to the dimension which gives reasonably uniform ceiling brightness.
- Luminaire spacings should be used which produce uniform illumination and prevent undesirable shadows.
- Flexible lighting layouts which will permit more luminaires or lamps to be added later should be planned. This will permit an increase in lighting intensity without spoiling the symmetry or architectural harmony of the initial installation.
- Plan the maintenance program along with the lighting layout. Be sure that all luminaires and lighting equipment are easily accessible and are designed to be cleaned easily and quickly.
- Consider the finish and reflection factor of ceiling and side walls. Recommend proper colors and finishes to provide surrounding brightness conditions which promote eye comfort and good seeing conditions.
- Double check all calculations and details to insure the proper number of units and the ultimate desired lighting result.

LIGHTING CALCULATIONS METHODS

Type Lighting	Method of Calculation
General	Lumen Method Interflectance Method Zonal Lumen Method Point-by-Point Method
Supplementary	Point-by-Point Method Lumens-per-Foot Method
Floodlighting	Beam Lumens Method Point-by-Point Method
Street	Isocandle Curves

LIGHTING SYSTEM VOLTAGES

60 Cycle		High Frequency
Incandescent Filament Lamps	Electric Discharge Lamps	Fluorescent Lamps
28-32	110-125	400**
110-125	200-216	600**
220-240	220-240	
	240-280	
	440-480*	
*Mercury lamp transformers.		
**Phase-to-phase voltage, with grounded neutral to provide less than 300 volts to ground (NEC).		

FORMULAS FOR GENERAL LIGHTING DESIGN

Lumen Method of Calculation

Average lumens reaching work plane = total initial lamp lumens \times CU \times MF

Average footcandles at work plane = $\frac{\text{total initial lamp lumens} \times \text{CU} \times \text{MF}}{\text{area of room in sq ft}}$

= total watts per sq ft \times overall lumens per watt \times CU \times MF

Area per lamp (sq ft) = $\frac{\text{initial lumens per lamp} \times \text{CU} \times \text{MF}}{\text{average footcandle level desired}}$

Area per luminaire (sq ft) = $\frac{\text{initial lumens per lamp} \times \text{no. of lamps per luminaire} \times \text{CU} \times \text{MF}}{\text{average footcandle level desired}}$

Total watts per sq ft = $\frac{\text{average footcandle level desired}}{\text{overall lumens per watt} \times \text{CU} \times \text{MF}}$

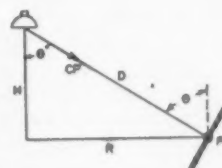
CU = Coefficient of Utilization

MF = Maintenance Factor

Point-by-Point Method of Calculation

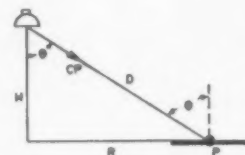
Illumination Normal to Light Ray:

$$E_n = \frac{CP}{D^2}$$



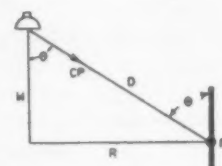
Horizontal Illumination:

$$E_h = \frac{CP}{D^2} \cos \theta = \frac{CP}{H^2} \cos^3 \theta = \frac{CP \times H}{D^3}$$



Vertical Illumination:






$$E_v = \frac{CP}{D^2} \sin \theta = \frac{CP}{H^2} \cos^2 \theta \sin \theta = \frac{CP \times R}{D^3}$$



- E_n = Illumination on plane normal to light ray (footcandles)
- E_h = Illumination on horizontal plane when light ray hits plane at angle θ (footcandles)
- E_v = Illumination on vertical plane when light ray hits plane at angle θ (footcandles)
- CP = Intensity of light source in direction of point P (candlepower)
- D = Distance from light source to point P (feet)
- H = Vertical mounting height of light source above plane of measurement (feet)
- R = Horizontal distance from light source to point P (feet)
- θ = Angle between light ray and a perpendicular line through light source (or a line perpendicular to horizontal plane through point P)

ROOM RATIO FORMULAS			ROOM RATIOS							
Direct, Semi-Direct and General Diffuse Lighting: $\text{Room Ratio} = \frac{W \times L}{\text{Mounting height above work plane} \times (W+L)}$			Room Width & Length (ft)		Direct, Semi-Direct and General Diffuse Height of luminaire above floor (ft) 8 10 12 15 19 27 43 Semi-Indirect and Indirect Approx. ceiling height above floor (ft) 10½ 13½ 16½ 21 27 39 63					
			W	L						
Semi-Indirect and Indirect Lighting: $\text{Room Ratio} = \frac{3 \times W \times L}{2 \times \text{ceiling height above work plane} \times (W+L)}$			10	10	0.9	0.7	0.5			
				14	1.1	0.8	0.6	0.5		
				18	1.2	0.9	0.7	0.5		
				24	1.3	0.9	0.7	0.6		
				30	1.4	1.0	0.8	0.6		
W = width of room L = length of room			14	14	1.3	0.9	0.7	0.6		
				20	1.5	1.1	0.9	0.7	0.5	
				30	1.7	1.3	1.0	0.8	0.6	
				40	1.9	1.4	1.1	0.8	0.6	
				60	2.1	1.5	1.2	0.9	0.7	0.5
			18	20	1.7	1.3	1.0	0.8	0.6	
				30	2.0	1.5	1.2	0.9	0.7	
				40	2.3	1.6	1.3	1.0	0.8	0.5
				60	2.5	1.8	1.4	1.1	0.8	0.6
				80	2.7	2.0	1.5	1.2	0.9	0.6
			25	30	2.5	1.8	1.4	1.1	0.8	0.6
				40	2.8	2.1	1.6	1.2	0.9	0.6
				60	3.2	2.4	1.9	1.4	1.1	0.7
				80	3.5	2.5	2.0	1.5	1.2	0.8 0.5
			40	40	3.6	2.7	2.1	1.6	1.2	0.8 0.5
				60	4.4	3.2	2.5	1.9	1.5	1.0 0.6
				80	4.9	3.6	2.8	2.1	1.6	1.1 0.7
				100	5.2	3.8	3.0	2.3	1.7	1.2 0.7
			60	60	5.5	4.0	3.2	2.4	1.8	1.2 0.8
				100	6.8	5.0	3.9	3.0	2.3	1.5 0.9
				140	7.6	5.6	4.4	3.4	2.6	1.7 1.0
			80	80	7.3	5.3	4.2	3.2	2.4	1.8 1.0
				140		6.8	5.4	4.1	3.1	2.1 1.3
				200		7.6	6.0	4.6	3.5	2.3 1.4
			100	100		6.7	5.3	4.0	3.0	2.0 1.2
				150			6.3	4.8	3.6	2.5 1.5
				200			7.0	5.3	4.0	2.7 1.6
			120	120			6.3	4.8	3.6	2.5 1.5
				160			7.2	5.5	4.2	2.8 1.7
				200				6.0	4.5	3.1 1.9
*Room ratios are preferred because of their greater accuracy. Use this table for conversion of Coefficient of Utilization data based on room indexes.			$RR = \frac{W \times L}{H (W + L)}$ For Type D, SD and GD, H = distance from luminaire to work plane 30 in. from floor. For Type SI and I, H = distance from ceiling to work plane 30 in. from floor.							

LIGHTING DESIGN AND LAYOUT DATA (continued)

	TYPES OF LIGHTING SYSTEMS			
	ICI* Light Distribution	Type of Luminaires	Type of Mounting	Lighting System Classification
	Direct 90% to 100% Downward	Recessed	In Ceiling	Recessed (Inc. or Fl.)
		Individual Unit	On Ceiling	Surface Mounted Direct
		Continuous Row	On Ceiling	Suspended Direct
		Individual Unit	On Ceiling	Architectural
		Continuous Row	On Ceiling, Side Walls, or Columns	Ornamental
		Luminous Architectural Elements	On Ceilings or Walls	Luminous Element
	Semi-Direct 60% to 90% Downward	Decorative Ornamental	Recessed in Ceiling	Translighted Ceiling
		Large-Area Low-Brightness	From Ceilings	Surface Mounted
		Diffuser Ceilings	On Ceiling	Semi-Direct
		Louver Ceilings	On Wall near Ceiling	Suspended
		Individual Unit	On Ceiling	Architectural
		Continuous Row	On Ceiling	Suspended
	General Diffuse 40% to 60% Downward	Individual Unit	On Ceiling	Direct-Indirect
		Continuous Row	On Ceiling	Suspended
		Individual Unit	On Wall	Semi-Indirect
		Continuous Row	On Wall	Semi-Indirect
		Luminous Cove	On Ceiling	Semi-Indirect
		Wall Bracket With Downward Component	On Wall	Semi-Indirect
	Semi-Indirect 60% to 90% Upward	Luminous Ornamental	On Ceiling	Suspended
		Individual Unit	On Ceiling	Semi-Indirect
		Continuous Row	On Ceiling	Indirect
		Wall Urns	On Wall	Indirect
		Cove	On Wall or In Ceiling	Cove
		Pedestal	Floor or Counter Top	Indirect
	Indirect 90% to 100% Upward	Ceiling Soffit**	In Ceiling	Indirect**

International Congress on Illumination approved classification of lighting systems according to a range of distribution of total light output upward or downward, in percentages as shown. A more detailed classification, as given here, has been found through practice to be more practical.

**According to ICI practice, soffit lighting might be classified as "direct". In actual practice, it is normally referred to as "indirect," since it is actually a form of cove lighting.

LUMINAIRE MOUNTING AND SPACING

Mounting Height of Luminaire	COMMERCIAL						INDUSTRIAL	
	Direct			Semi-Indirect			Spread	Concentrating
	Usual Spacing Between Units	Max. Spacing Between Units	Spacing* from Walls	Spacing Between Units	Spacing* from Walls	Length of Suspension	Maximum Spacing ¹ (ft.)	
Ceiling Height for Indirect and Semi-Indirect Luminaires (feet)							Mounting Heights Above Floor	Spacing Between Units ² Spread Concen't.
8	7	7½	3	9	3	1-1½	15	12 -
9	8	8	3	9½	3	1-1½	16	12 -
10	9	9	3½	10½	3½	1½-2½	18	18 -
11	10	10½*	3½	12	3½	2-3	20	20 -
12	10-12	12	4	14	4	3-4	22	20 -
13	10-12	13	4	15	4	4-5	24	23 16
14	10-13	15	5	17	5	4-6	26	25 17
15	10-13	17	5	19	5		28	30 18
16	10-13	19	6	21	6		30 or more	30 20
18	10-20	21	6	23	6			
20 or more	18-24	24	7	26	7			

*Spacings apply where desks or benches are next to wall, otherwise one-half the spacing between units is satisfactory.

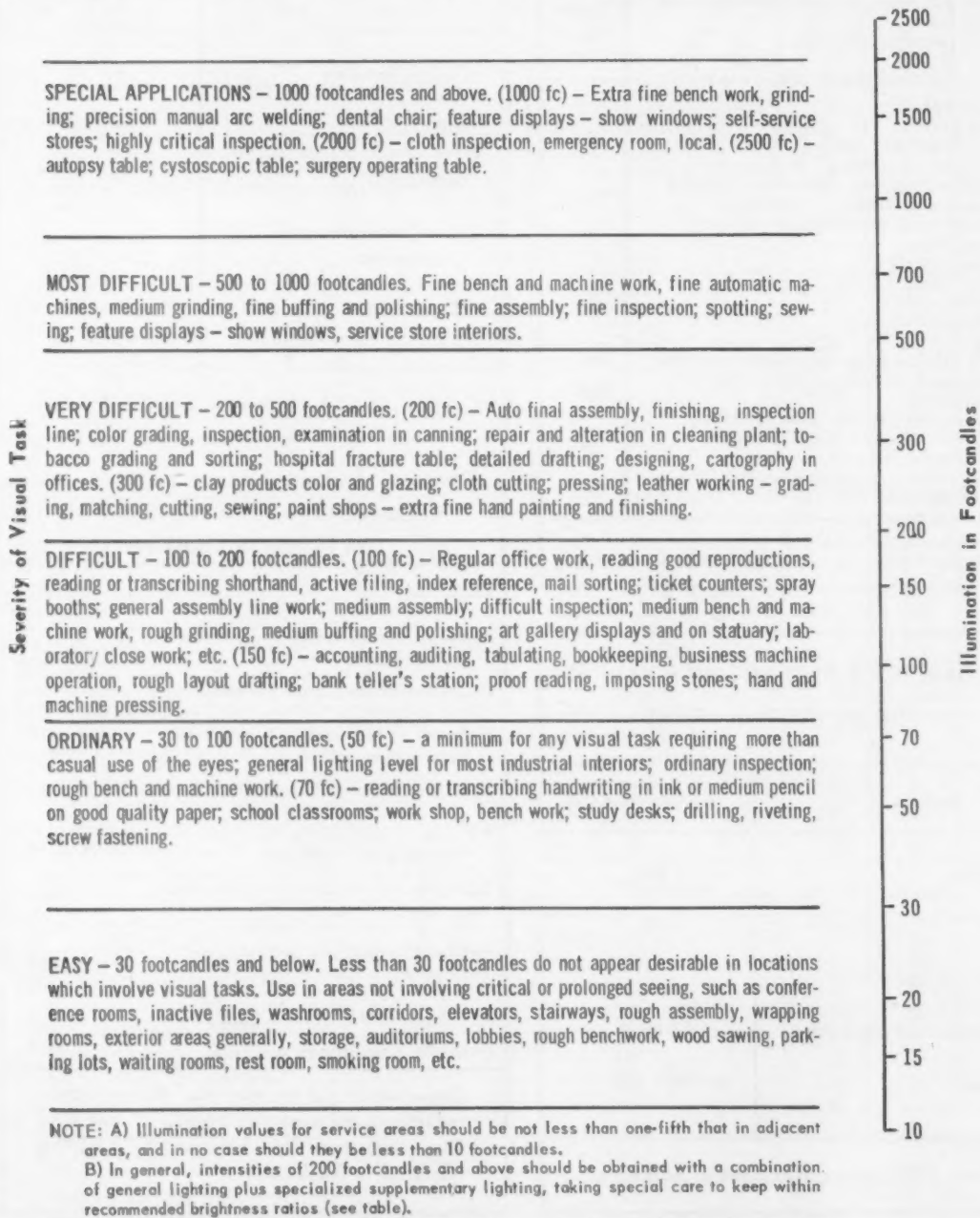
¹Units may have to be spaced closer to obtain desired illumination values.

²Where benches or machines are next to wall, spacing from wall should not exceed 1/3 spacing between units. Otherwise 1/2 unit spacing is suitable.

NEW LEVELS OF ILLUMINATION

Presented here is a condensed compilation of the new (1958) footcandle values recommended for specific visual tasks by the Illuminating Engineering Society and classified according to severity of the visual task. Note that these values apply to seeing tasks, and are not "average" values for general illumination on the

horizontal plane. Higher initial levels should be provided as required by maintenance conditions, and special luminaire arrangements should be used for visual tasks in a plane other than horizontal. For more detailed information, see Fig. 9-53 in the IES Lighting Handbook -- 3rd Edition.



**RECOMMENDED ILLUMINATION FOR
RESIDENCES (Footcandles)***

General Lighting	
Entrances, hallways, stairways, stair landings	10**
Living room, dining room, bedroom, family room, sun room, library, game or recreation room	10**
Kitchen, laundry, bathroom	30
Specific Visual Tasks	
Table games	30
Kitchen sink	70
Kitchen range and work surfaces	50
Laundry, trays, ironing board, ironer	50
Reading and writing, including studying	30
Books, magazines, newspapers	30
Handwriting, reproduction and poor copies	70
Desks, study	70
Reading music scores	30
Simple scores	30
Advanced scores	70
Sewing	30
Dark fabrics (fine detail, low contrast)	200
Prolonged periods (light to medium fabrics)	100
Occasional periods (coarse thread, large stitches, high contrast thread to fabric)	30
Shaving, makeup, grooming; on the face at mirror locations	50

* Minimum on the visual task.

** General lighting for these areas need not be uniform.

**RECOMMENDED REFLECTANCE VALUES
FOR INDUSTRIAL AREAS**

Surface	Reflectance (%)
Ceiling	80
Wall	60
Desk and bench tops	35
Machines and equipment	25 to 30
Floors	not less than 15

Source: IES Lighting Handbook - 3rd Edition

**RECOMMENDED SURFACE REFLECTANCES
FOR OFFICES**

Surface	Reflectance Range (%)
Ceiling finishes	80 - 92
Walls	40 - 60
Furniture	26 - 44
Office machines and equipment	26 - 44
Floors	21 - 39

Source: IES Lighting Handbook - 3rd Edition

**RECOMMENDED BRIGHTNESS RATIOS
FOR INTERIOR LIGHTING**

Condition	Ratio
Between visual tasks and adjacent surroundings Example: White paper and desk top	1 to 1/3
Between visual tasks and more remote darker surfaces Example: White paper on desk & floor	1 to 1/10
Between visual tasks and more remote brighter surfaces Example: White paper on desk and luminaires	1 to 10
Between luminaires and adjacent surfaces in normal field of view	20 to 1
Anywhere within normal field of view Example: Luminaires and floor	40 to 1

These ratios are recommended as maximums: reductions are generally beneficial. See also Fig. 11-8 and Fig. 14-2 in IES Lighting Handbook - 3rd Edition

LIGHTING DESIGN AND LAYOUT DATA (continued)

RATED AVERAGE LIFE, FLUORESCENT LAMPS

Type of Lamps	Burning Hours Per Start			
	3	6	12	Continuous*
T-8 and T-12 preheat, rapid start, high output; T-6, T-8 and T-12 slimline; T-12 instant start; T-17 preheat; All circlines	7500	Plus 25%	Plus 60%	Plus 150%
T-17 instant start; 6-, 8-, 13-watt T-5 preheat 14-watt T-12 preheat	6000			
Power Groove lamps	5000			
4-watt T-5	4000			
Cold cathode LP	15000	Life not affected by number of starts		
Cold cathode HP	25000			

*Light output depreciates steadily as lamps are burned. Where infrequent starting, or continuous burning are involved, lamps should be replaced before they reach average life, for maximum lighting value.

Source: General Electric Co. Lamp Bulletin No. LS-101

RATED AVERAGE LIFE, MERCURY VAPOR LAMPS

Type Lamps	Rated Life (Hours)
PAR-38 bulb, 100-watt	2000 - 6000
PS-25 and BT-25 bulbs, 100-watt; PS-35 bulb, 125-watt; BT-28 bulb; 175-watt; BT-37 bulb, 430-watt; T-9½ bulb, 3,000-watt	6000
BT-28 bulb, 250-watt; T-16, BT-24, BT-37 R-52, R-57 bulbs, 400-watt; BT-56 bulb, 1000-watt	6000 - 7000
BT-37 bulb, 425-watt; BT-46 bulb, 700-watt	7000
R-57 bulb, 750-watt	8000
BT-56 bulb, 700-watt	9000

Burning hours shown are "economic life" under typical operating conditions. Actual burning hours may be up to 50% greater, depending on operating conditions.

Source: Based on data shown in Fig. 8-90, IES Lighting Handbook - 3rd Edition.

RATED AVERAGE LIFE, INCANDESCENT LAMPS

Type Lamps	Rated Life (Hours)
General Service Lamps; sizes 75, 100, 150, 200, 300 watts, A and PS bulbs	750
General Service Lamps; sizes 300, 500, 750, 1000, 1500 watts, PS bulbs, mogul base	1000
Lumiline Lamps, 30, 40, 60 watts	1500
Reflector and Projector Lamps	2000
Extended Life, Special Service Lamps 25 to 1500 watts	2500

Source: Lamp manufacturers' bulletins.

DATA ON TYPICAL FLUORESCENT BALLASTS (Used for General Lighting)

Number and Type Lamp	Weight (lbs)	Line Current (amps)	Watts Consumed	
			By Ballast	Per Lamp*
For 60-cycle, 110-125 Volt Circuits				
2-20/T12	3 1/3	.42	9	24.5
2-30/T8	4	.70	17	38.5
2-40/T12	4	.85	18	49.0
2-40/T12/IS	9 1/3	.95	30	55.0
2-40/T12/RS	4	1.30	13	46.5
3-40/T12/RS	8	1.30	20	46.7
2-48T12	9 3/4	.95	30	53.0
2-72T12	2	1.40	29	69.5
2-96T12	13 3/4	1.60	34	91.0
2-48T12/HO	10	1.20	20	70.0
2-72T12/HO	12 1/2	1.70	30	100.0
2-96T12/HO	16	2.00	40	125.0
2-48PG17	15	2.60	41	128.5
2-72PG17	16	3.20	50	180.0
2-96PG17	16	4.00	55	227.5
For 60-cycle, 220-250 Volt Circuits				
2-40/T12	5 2/3	.43	20	50.0
2-90/T17	14 1/3	.93	31	105.5
2-40/T12/RS	4	.41	12	46.0
2-96T12	12	.80	29	88.5
2-96/T12/HO	13	1.10	54	132.0
For 60-cycle, 240-280 Volt Circuits				
2-40/T12	5 1/4	.37	18	49.0
2-90/T17	14 1/3	.83	31	105.5
2-48T12/HO	10	.56	30	55.0
2-48T12	5 3/4	.40	20	48.0
4-90/T17	16 1/2	1.65	36	99.0
For 60-cycle, 260-290 Volt Circuits				
2-40/T12	3 1/2	.19	10	45.0
2-40/T12/RS	4	.80	10	45.0
3-40/T12/RS	8	.55	20	46.7
2-96/T12/HO	15	.94	54	132.0
2-72T12	6	.62	25	67.5
2-96T12	6	.62	25	86.5
2-96PG17	12	1.85	75	237.5
* Lamp wattage plus proportional watts loss in ballast. Based on manufacturers' bulletins.				

LAMP SPECIFICATIONS

STANDARD FLUORESCENT LAMPS				
Lamp Designation	Burnouts Per BLH*	Light Output**		Brightness (Foot-Lamberts)
		Initial Lumens	Initial L/W*	
Preheat Start Lamps (Starters Required)				
F20T12	134	1,030	51.5	1,600
F40CW**	48	2,800	70.0	2,100
F90T17	26	5,200	57.6	2,300
F40CW/3	43	3,100	77.5	2,350
Instant Start Lamps				
F40T12/IS	54	2,650	66.2	1,900
F40T17/IS	55	2,650	66.2	1,150
F48T12 Slimline	57	2,600	66.6	2,100
F72T12	37	4,100	73.2	2,100
F96T12 Slimline	26	5,600	75.6	2,100
Rapid Start Lamps (No Starters Required)				
F40CW**	48	2,800	70.0	—
F40CW/3	43	3,100	77.5	—
F48T12/HO	40	3,500	58.4	2,800
F72T12/HO	25	5,550	65.2	2,800
F96T12/HO	18	7,600	72.5	2,800
F48T12/1500	21	6,200	56.8	5,300
F72T12/1500	14	9,300	59.2	5,100
F96T12/1500	10	13,250	65.0	5,050
F48PG17	22	6,900	62.7	...
F72PG17	14	10,900	68.2	...
F96PG17	9	15,000	70.0	...

* Based on 7,500 hours average rated life, and lumen output of cool white lamps.

** All lumen values for cool white lamps.

* Lumens per watt, lamp watts only

** New 40-watt T12 lamp, interchangeable between preheat circuits and rapid start circuits.

*** Brightness varies. See manufacturers' literature for details.

Source: General Electric Co., Lamp Dept., and IES Lighting Handbook — 3rd Edition

COLD CATHODE FLUORESCENT LAMPS					
Lamp Designation	Lamp Current (ma)	Lamp Watts (HP)*	Light Output		Brightness (Foot-Lamberts)
			Initial Lumens	Initial L/W	
2545 (T-8)	120	28	1000	35.8	1100
	150	33	1200	32.5	1280
	200	40	1500	37.5	1600
2569 (T8)	120	37	1600	43.3	1210
	150	43	1850	43.0	1440
	200	52	2200	42.4	1650
2593 (T8)	120	46	2200	47.8	1250
	150	54	2600	48.2	1480
	200	65	3200	49.4	1700
Hairpin 6-in. Dia.	120	46	2200	47.8	1250
	150	54	2600	48.2	1480
	200	65	3200	49.4	1700

*High Pressure
 Source: Based on data in Fig. 8-101, IES Lighting Handbook — 3rd Edition

STANDARD INCANDESCENT LAMPS					
Lamp Designation		Rated Life (Hours)	Burnouts Per BLH**	Light Output	
Watts	Bulb			Initial Lumens	Initial L/W
75	A-19	750	...	1,150	15.3
100	A-19*	750	...	1,700	17.0
150	A-23	750	...	2,700	18.0
200	PS-25	750	351	3,800	19.0
200	PS-30	750	360	3,720	18.6
300	PS-30	750	223	6,000	20.0
300	PS-35	1000	174	5,750	19.2
500	PS-40	1000	109	9,900	19.8
750	PS-52*	1000	60	16,700	22.3
1000	PS-52*	1000	44	23,000	23.0
1500	PS-52	1000	30	33,000	22.0
750	T-24	1000	70	14,200	19.0
1000	T-24	1000	50	20,000	20.0
500	R-52	2000	64	7,850	15.8
750	R-52	2000	39	12,700	17.0
1000	RB-52*	2000	28	18,000	18.0
550	R-57	2000	62	8,100	14.8
800	R-57	2000	37	13,500	16.9
1000	R-57	2000	31	16,300	16.3

* Coiled-coil filament axially mounted.
 ** Average lamp burnouts per billion lumen hours (calculated).
 Source: General Electric Co., Lamp Department, and IES Lighting Handbook — 3rd Edition.

STANDARD MERCURY VAPOR LAMPS						
Lamp Designation			Rated Life (Hours)	Burnouts Per BLH**	Initial Lumens	Initial L/W***
Watts	Bulb	ASA*				
100	PS-25	H4AC	6000	42	4,000	40.0
175	BT-28	H22KD	6000	23	7,200	41.1
250	BT-28	H5KF	6-7000	16-14	10,500	42.0
400	BT-24	H25DE	6-7000	11-9	15,500	38.7
400	BT-37	H1LB	6-7000	7-6	23,000	57.4
425	BT-37	H17LB	7000	7	20,000	47.5
430	BT-37	H24LB	6000	9	18,500	43.0
700	BT-46	H18NE	7000	3.6	40,000	57.2
700	BT-56	H15GW	9000	4.2	34,500	49.4
750	R-57	—	8000	5.5	22,500	30.0
1000	BT-56	H18GW	6-7000	3.2-2.8	51,800	51.8
1000	BT-56	H12GW	6-7000	2.9-2.5	58,000	58.0
3000	T-9½	H9FJ	6000	1.3	132,000	43.0

* New ASA designations have been adopted by all light source manufacturers.
 ** Average lamp burnouts per billion lumen hours (calculated), based on average rated life. Lamp life may be increased by as much as 50% under certain operating conditions.
 *** Based on lamp watts only.
 Source: Based on data given in Fig. 8-90, IES Lighting Handbook — 3rd Edition.

REFLECTOR AND PROJECTOR LAMPS					
Bulb Types	Watts	Beam Spread (Degrees)*	Approx. Beam Lumens	Candle-power (10% Cone)**	Approx. Total Lumens
Reflector Spotlighting Lamps					
R-30	75	50	400	1,800	770
R-40	150	40	810	6,000	1,780
R-40	300	35	1,800	13,500	3,700
R-40	500	35	3,100	22,000	6,400
Reflector Floodlighting Lamps					
R-20	30	80	145	350	200
R-30	75	130	610	430	770
R-40	150	110	1,500	1,250	1,780
R-40	300	115	2,800	2,700	3,700
R-40	500	115	5,400	5,200	6,400
Projector Spotlighting Lamps					
PAR-38	75	30x30	480	4,000	750
PAR-38	150	30x30	1,100	10,500	1,730
PAR-46	200	17x23	1,200	32,000	2,350
PAR-56	300	15x20	1,800	70,000	3,650
PAR-64	500	13x20	3,000	110,000	6,000
Projector Floodlighting Lamps					
PAR-38	75	60x60	600	1,700	750
PAR-38	150	60x60	1,350	3,700	1,730
PAR-46	200	20x40	1,300	11,000	2,350
PAR-56	300	20x35	2,000	22,000	3,650
PAR-56	300	30x60	2,100	10,000	3,650
PAR-64	500	20x35	3,400	35,000	6,000
PAR-64	500	35x65	3,500	12,000	6,000

*Measured to 10% of maximum candlepower
 **Average initial CP in 10° zone
 Source: G.E. Co. Lamp Bulletin LS-152, Feb. 1959

COMPARATIVE STROBOSCOPIC EFFECT OF VARIOUS LIGHT SOURCES		
Operated on 60-Cycle Supply		
Lamp Type	Method of Operation	Relative Stroboscopic Effect
Incandescent		
200-watt		1
40-watt		7
Fluorescent		
Green	Single-lamp ballast	11
Blue	Single-Lamp ballast	49
White	Single-lamp ballast	19
White	2-lamp ballast	9
White	Single-lamp ballast on each phase of 3-phase circuit (3 lamps)	3
White	3 lamps: 1 on single-lamp ballast, 2 on 2-lamp ballast	14

Also see Figs. 8-48 and 8-49 in IES Lighting Handbook 3rd Edition
 Source: Westinghouse Lighting Handbook (1956)

COLOR TEMPERATURE OF VARIOUS LIGHT SOURCES	
Light Source	Degrees K*
Natural Daylight	
Light from clear blue sky	12,000-27,000
Light from hazy or smoky sky	7,500-8,400
Light from totally overcast sky	6800
Sunlight, plus light from clear sky (noon)	6500
Direct sunlight (noon in midsummer)	5800
Light from heated sources**	
"Daylight" fluorescent lamps**	6500
Blue (daylight) photoflash lamps	6300
Cool white fluorescent lamps**	4500
Clear photoflash lamps	3800
White (standard) fluorescent lamps**	3500
Photoflood lamps	3400
500-watt projection lamp	3175
1000-watt standard incandescent lamp	3000
500-watt standard incandescent lamp	2950
60-watt standard incandescent lamp	2800

*Absolute temperature scale having its zero at -273°C (-459.4°F).
 **By definition, color temperature applies only to light generated by heat (same color as a black body at that temperature), but fluorescent lamps have been arbitrarily color-designated in degrees Kelvin for purposes of simplicity.

FLUORESCENT LAMP LUMEN OUTPUT RATIOS	
(Standard Cool White = 100)	
Color of lamps	Multiplying Factor
Deluxe Cool White (CW/X)	0.71
Deluxe Warm White (WW/X)	0.71
Daylight (D)	0.93
Soft White (SW)	0.68
Green (G)	1.20
Gold (GO)	0.60
Blue or Pink (B or PK)	0.45
Red (R)	0.06

INTERCHANGEABILITY OF FLUORESCENT LAMPS 40-watt T-12 Bipin			
Lamp Type	Ballast Type		
	Preheat	Instant Start	Rapid Start
Preheat	O.K.	Not Recommended	Will Not Start
Instant	Will Not Start	O.K.	Will Not Start
Rapid Start	O.K.	Not Recommended	O.K.

Source: IES Lighting Handbook - 3rd Edition.

LOAD AND OUTPUT OF TYPICAL FLUORESCENT LUMINAIRES

Fluorescent Lamps				1-Lamp Luminaire			2-Lamp Luminaire*		
Type Lamp	Length (ins)	Lamp Watts	Lamp Current (ma)	Lumens	Total Watts	L/W	Lumens	Total Watts	L/W
40T12	48	39.6	430	2,650	50.6	52.4	5300	97.2	54.5
40T12	48	—	—	2,800	—	—	5600	—	—
40T12/1S	48	40.6	425	2,500	60.0	41.6	5000	100.0	50.0
40T12/RS	48	39.6	430	2,650	52.0	51.0	5300	92.0	57.6
40CW/3	48	—	—	3,100	—	—	6200	—	—
48T12	48	38.5	428	2,360	—	—	4720	107.0	44.1
48T12	48	38.5	428	2,360	—	—	4720	97.0	48.6
48T12/RS	48	60.0	800	3,350	90.0	37.2	6700	140.0	47.9
48T12/RS	48	109.0	1500	6,200	—	—	12,400	250.0	49.6
48PG17	48	107.0	1500	6,000	—	—	12,000	255.0	47.1
40T17/1S	60	42.5	420	2,500	62.5	40.0	5000	105.0	47.6
90T17	60	90.0	1550	5,200	111.0	46.9	10,400	211.0	49.3
72T12	72	56.0	425	3,600	—	—	7,200	146.0	49.3
72T12	72	56.0	425	3,600	—	—	7,200	137.0	52.5
72T12/RS	72	80.5	800	5,250	125.0	42.0	10,500	200.0	52.5
72T12/RS	72	157.0	1500	9,300	—	—	18,600	390.0	47.7
72PG17	72	155.0	1500	9,300	—	—	18,600	360.0	51.6
96T12	96	73.5	425	5,100	—	—	10,200	181.0	56.4
96T12	96	73.5	425	5,100	—	—	10,200	175.0	58.2
96T12/RS	96	105.0	800	7,300	135.0	54.1	14,600	254.0	57.5
96T12/RS	96	204.0	1500	13,250	—	—	26,500	480.0	55.2
96PG17	96	215.0	1500	15,000	—	—	30,000	485.0	61.9

*Using HPF lead-lag ballasts and standard cool white lamps. For lumen output using other color lamps, use the multiplying factors given in table "Fluorescent Lamp Lumen Output Ratios"

●Based on use of 2-lamp series ballasts.

Source: Computed based on data in Figs. 8-98, 8-99, 8-100 and 8-103 of IES Lighting Handbook — 3rd Edition, and General Electric Co. Bulletin LS-101, July, 1958.

FLUORESCENT LAMP COLOR GUIDE

Application	Deluxe		Standard	
	Warm	Cool	Warm	Cool
Groceries	—	Good	—	Fair
Meat Markets	—	Good	—	Fair
Bakeries	Good	Fair	—	—
Confectionery	Good	Fair	—	—
Restaurants	Good	—	—	—
Tea Rooms	Good	—	—	—
Taverns	Good	—	Fair	—
Men's Wear	Fair	Good	—	Fair
Women's Wear	Good	—	Fair	—
Children's Wear	Good	—	Fair	—
Shoe Store	Good	—	Fair	—
Barber & Beauty*	Good*	Fair	—	—
Drug Stores	—	Good	—	Fair
Florist	Fair	Good	—	—
Jewelry	—	Good	—	Fair
Home Furnishings	Good	Fair	—	—
Variety	—	Good	—	Fair
Schools	—	—	—	Good
Offices	—	—	Good	Fair

*Except for tinting

Source: Lighting Products Inc.

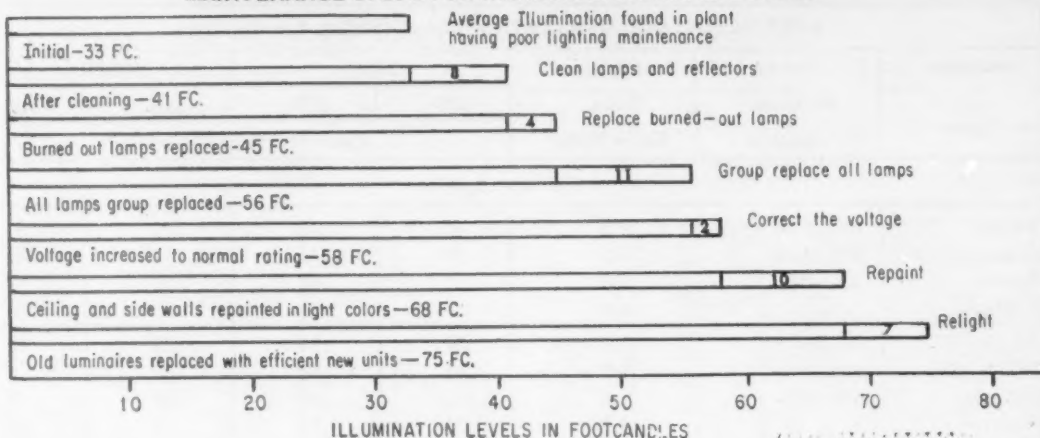
EFFICIENCY OF PRODUCTION OF COLORED LIGHT

Color	Approx. Lumens per Watt	
	Fluorescent	Filament*
Blue	20 to 26	0.5 to 1.5
Green	55 to 75	0.5 to 3
Yellow	22 to 31	5 to 10
Red	3 to 5	1 to 14

*Based on 100-watt lamp with typical color filters of various kinds; colored bulbs, glass roundels and caps, gelatins, dyes and lacquers.

Source: Westinghouse Lighting Handbook-1956.

MAINTENANCE STEPS FOR INCREASED LIGHTING LEVELS



Lighting maintenance is a highly important factor in lighting system design. The above chart illustrates its effectiveness on a typical lighting installation. Increased reflectances, improved brightness ratios, and higher lighting levels may be effected through simple maintenance procedures.

Select luminaires and lighting equipment which include easy maintenance features designed and built into the units by the lighting equipment manufacturers; and provide easy access to all luminaires and lighting equipment.

MAJOR CAUSES OF LIGHT LOSS In Lighting Systems

Cause of Depreciation	Percent Loss
Lamp Depreciation (End of rated life)	
Incandescent	20
Fluorescent	30
Mercury Vapor	23
Circuit Voltage Depreciation	
With adequate wiring	Negligible
With poor wiring and overloading of circuits	5-20
Luminaire Light Absorption	18-35
Paint Depreciation	
Absorption of light by walls, ceilings, floors and other surfaces	5 (per year)
Dirt and Dust Depreciation	
1-month cleaning intervals	10
3-month cleaning intervals	15
6-month cleaning intervals	20
Cleaned when lamps burn out	30
Lamp Outage Depreciation	Up to 12

TYPES OF MAINTENANCE EQUIPMENT Used for Lighting Servicing

Equipment	Mounting Height (Feet)			
	To 12	12-18	18-30	Over 30
Catwalk (Or Truss)			X	X
Crane (Where Available)			X	X
Crows-Nest Ladder			X	
Disconnecting Hanger		X	X	X
Portable Maintenance Platform		X	X	
Relamping Bridge			X	X
Step Ladder	X			
Straight Ladder		X		
Telescoping Platform Tower		X	X	

LIGHT SOURCE EFFICIENCIES

Source	Approx Lumens per Watt*
Candle (luminous efficiency equivalent)	0.1
Oil lamp (luminous efficiency equivalent)	0.3
Original incandescent lamp (1879)	1.4
60-watt carbon filament lamp (1905)	4.0
60-watt coiled coil tungsten filament lamp (1954)	13.9
1000-watt general service lamp (1959)	23.0
No. 1 photoflood lamp (1959)	34.4
1000-watt Type H12KP (ASA) mercury vapor lamp (1958)	58.0
40-watt cool white fluorescent lamp, lamp only (1959)	77.5

*Initial value, lamp only

LIGHTING DESIGN AND LAYOUT DATA (continued)

COEFFICIENTS OF UTILIZATION FOR TYPICAL LUMINAIRES						
Luminaire Type	Distribution and Maximum Spacing	Ceiling Walls Room Ratio	80%		50%	
			50%	30%	50%	10%
			Coefficients of Utilization			
Direct Lighting						
1-Lamp	0% Up	1.0	.43	.40	.42	.37
Aluminum	60% Down	1.5	.50	.47	.49	.44
Troffer	0.8 x MH	2.5	.55	.53	.54	.50
Baffled		4.0	.59	.57	.56	.54
3-Lamp	0% Up	1.0	.37	.31	.35	.27
24" Troffer	60% Down	1.5	.45	.40	.43	.35
Diffusing	0.9 x MH	2.5	.52	.48	.49	.43
Plastic		4.0	.56	.54	.54	.50
Mercury	0% Up	1.0	.48	.45	.47	.42
Aluminum	70% Down	1.5	.57	.53	.55	.50
High Bay	0.9 x MH	2.5	.64	.61	.62	.58
		4.0	.68	.66	.66	.63
Mercury	0% Up	1.0	.50	.46	.49	.42
Porcelain	75% Down	1.5	.59	.55	.58	.52
High Bay	1.0 x MH	2.5	.67	.64	.66	.61
Ventilated		4.0	.74	.70	.71	.67
Mercury	0% Up	1.0	.67	.63	.64	.60
Prismatic	70% Down	1.5	.73	.70	.69	.65
High Bay	0.6 x MH	2.5	.78	.75	.74	.70
		4.0	.81	.79	.76	.74
Semi-Direct Lighting						
4-Lamp	10% Up	1.0	.27	.23	.25	.19
Enclosed	50% Down	1.5	.34	.30	.30	.25
Diffusing	1.0 x MH	2.5	.40	.37	.36	.32
Plastic		4.0	.45	.41	.40	.36
2-Lamp	10% Up	1.0	.47	.41	.45	.36
Porcelain	70% Down	1.5	.60	.54	.56	.48
Industrial	1.0 x MH	2.5	.71	.65	.66	.59
Reflector		4.0	.78	.74	.73	.67
2-Lamp	10% Up	1.0	.46	.38	.42	.33
Bare	80% Down	1.5	.58	.51	.53	.44
Lamp	1.0 x MH	2.5	.69	.63	.64	.55
Channel		4.0	.77	.72	.71	.64
Direct - Indirect Lighting						
Multilamp	30% Up	1.0	.31	.27	.28	.22
Metal	35% Down	1.5	.37	.33	.32	.27
Panels and	1.1 x MH	2.5	.44	.41	.39	.34
Louvers		4.0	.50	.47	.42	.39
2-Lamp	45% Up	1.0	.37	.30	.32	.24
Metal Sides	35% Down	1.5	.46	.40	.38	.31
Louver	1.2 x MH	2.5	.57	.51	.47	.40
Shielding		4.0	.63	.59	.51	.45

LIGHTING DESIGN AND LAYOUT DATA (continued)

COEFFICIENTS OF UTILIZATION FOR TYPICAL LUMINAIRES						
Luminaire Type	Distribution and Maximum Spacing	Ceiling Walls Room Ratio	80%		50%	
			50%	30%	50%	10%
			Coefficients of Utilization			
Semi-Indirect Lighting						
4-Lamp Translucent Sides and Bottom	60% Up 15% Down 1.2 x MH	1.0 1.5 2.5 4.0	.26 .36 .46 .54	.20 .30 .40 .50	.19 .25 .32 .37	.12 .18 .25 .32
Fluorescent Grid Luminous Indirect	65% Up 10% Down 1.2 x MH	1.0 1.5 2.5 4.0	.27 .37 .48 .56	.21 .30 .42 .51	.20 .26 .33 .38	.13 .19 .26 .33
Indirect Lighting						
Luminous Indirect Fluorescent	65% Up 5% Down 1.2 x MH	1.0 1.5 2.5 4.0	.19 .26 .35 .39	.14 .20 .30 .37	.13 .18 .24 .27	.07 .12 .18 .23
Silvered Bowl Indirect	85% Up 0% Down 1.2 x MH	1.0 1.5 2.5 4.0	.24 .35 .48 .57	.16 .26 .40 .52	.17 .23 .29 .36	.08 .13 .21 .29
Fluorescent Cove Without Reflector	Cove 12" to 18" Below Ceiling	1.0 1.5 2.5 4.0	.18 .25 .33 .36	.15 .21 .30 .34	.10 .15 .20 .22	.07 .11 .17 .20
Luminous Ceiling Lighting						
Extended area system using diffusing glass or plastic.		1.0 1.5 2.5 4.0	.31 .40 .49 .56	.26 .35 .46 .54	— — — —	— — — —
Ceiling cavity reflectance 75%						
Extended area system using opaque white louvers.		1.0 1.5 2.5 4.0	.25 .30 .33 .35	.22 .26 .31 .34	— — — —	— — — —
Ceiling cavity reflectance 75%						
* Above CU values are based on floor of 10% reflectance. Increase all CU values by percentages shown below for floors having 30% reflectance.						
Percentage increase for floors having 30% reflectance as compared with 10% reflectance		1.0 1.5 2.5 4.0	5% 7% 10% 14%	3% 6% 8% 12%	4% 5% 7% 8%	1% 2% 4% 6%
NOTE: Coefficients of Utilization shown above here were condensed from Fig. 9-3, IES Lighting Handbook - 3rd Edition, covering popular types of luminaires only. CU values are shown for four roomratios only (1.0, 1.5, 2.5 and 4.0). Interpolate for other room ratios, or refer to manufacturers' complete CU data for specific luminaires when greater accuracy is required.						

A SUMMARY OF CALCULATIONS NECESSARY TO DETERMINE ELECTRIC SPACE HEATING LOADS

1. Design temperature difference of locality in which installation is to be made:

Design temperature difference = outdoor design temperature - indoor temperature

- Obtain outdoor design temperature from Table 11.
- 70F is usually used as indoor temperature.

2. Watts required to offset loss through building materials:

Watts = area × transmission loss factor × design temperature difference

- Make this calculation for each room for each of the following:

Outside walls
Windows
Outside doors
Ceiling (if space above is not heated)
Floor (if space below is not heated)

- Obtain transmission loss factors for each of the above from Tables 1 through 9 on the following pages. Building materials involved must be obtained from plans or specifications or by actual examination of structure.

- Obtain areas of each of the above from plans, specifications, or actual measurements.

- Design temperature difference is as calculated in (1) above.

3. Watts required to offset loss due to infiltration:

Watts = .0053 × volume × air changes per hour × design temperature difference

- Make this calculation for each room.
- Obtain room volume by multiplying length × width × ceiling height.

- Obtain number of air changes per hour from Table 7.
- Design temperature difference is as calculated in (1) above.

4. Rating in watts of heating equipment for each room:

Watts = transmission loss + infiltration loss

- Transmission loss is as calculated in (2) above.
- Infiltration is as calculated in (3) above.

5. Estimated annual kilowatt-hour consumption:

$$\text{Kilowatt-hours} = \frac{\text{kilowatts} \times \text{degree-days} \times 18.5}{70 - \text{outdoor design temperature}}$$

- For "kilowatts" use sum of all room ratings found in (4) above, converted to kw.
- Obtain degree-days and outside design temperature from Table 11. (Outside design temperature should be same value as used in (1) above.)

- Note: This formula is often modified by heating people by replacing the factor 18.5 with values as high as 24, or as low 12, based on their own experience with particular heating equipment in the same general locality.

6. Estimated annual heating cost:

Cost = annual kilowatt-hours × local power rate

- Annual kilowatt-hours are as calculated in (5) above.
- Rate applicable to electric heating should be obtained from local utility.

7. Adjustment of equipment rating due to variations in supply voltage:

$$\text{Watts required} = \text{calculated watts} \times \left(\frac{\text{rated voltage}}{\text{actual voltage}} \right)^2$$

- This adjustment should be made if the actual voltage available to the premises differs from the rated voltage of the equipment.
- Calculated watts are as found in (4) above.
- Rated voltage of heating equipment should be obtained from manufacturer (usually 118 or 236 volts).

- Actual voltage should be obtained by measurement or from competent source.
- If "watts required" as found by this formula is much greater than as calculated in (4) above, wattage rating of installed equipment must be increased accordingly.

8. Installation

- Wattage requirements for each room as found in (4) and adjusted in (7) above should be met, the actual placement and number of heating units depending upon the type of heating equipment selected.

- Use Chart 2 to determine sizes of circuit conductors.
- Actual circuit lengths should be kept below those shown on chart wherever possible to avoid unnecessary reduction in voltage.

HEAT LOSS COEFFICIENTS

TABLE 1. FRAME WALLS

		TRANSMISSION LOSS (Watts per sq ft per °F temp diff)												
Exterior Finish		Wood Siding, Wood Shingles, or Wood Panels			Wood Shingles with Insulated Backer Board or Asphalt Insulating Siding				Brick Veneer or Plywood (3/8 in.)					
		Sheathing*			Sheathing*				Sheathing*					
Interior Finish**		Sheathing*			Insulating Board			Ply-wood			Wood			
		Gypsum	Ply-wood	Wood	1/2 in.	1 in.	Gypsum	Ply-wood	Wood	1/2 in.	1 in.	Gypsum	Ply-wood	Wood	1/2 in.	1 in.
Metal Lath; Plaster (3/4 in.) Gypsum Board (3/8 in.) Wood Lath; Plaster Gypsum Lath (3/8 in.); Plaster Insulating Board Lath (1/2 in.); Plaster		.091	.076	.070	.062	.076	.079	.067	.053	.103	.105	.085	.079	.064
		.085	.073	.067	.059	.073	.073	.064	.059	.053	.097	.079	.073	.062
		.082	.070	.067	.056	.070	.073	.062	.059	.053	.094	.079	.073	.062
		.082	.070	.067	.056	.070	.073	.062	.059	.053	.094	.079	.073	.062
		.064	.056	.053	.047	.056	.056	.050	.047	.044	.067	.070	.062	.050

*Sheathing details: Gypsum 1/2 in.; Plywood 5/16 in.; Wood 25/32 in. plus building paper; Insulating Board 25/32 in. Furring strips 1 in. thick are assumed

between wood shingles and gypsum, plywood and insulating board.

*Plaster, where used, assumed 1/2 in. thick, sand aggregate, unless otherwise stated.

Note: See Chart 1 for factors corrected for insulation.

TABLE 2. MASONRY WALLS

			TRANSMISSION LOSS (Watts per sq ft per °F temp diff)																	
			Face Brick (4 in.), or Stone (4 in.), or Precast Concrete (4 to 6 in.) plus								Common Brick (4 in.) or Precast Concrete (8 in.) plus									
			Concrete Block				Hollow Clay Tile				Concrete Block				Hollow Clay Tile					
Interior Finish*	Exterior Backing	Exterior Facing	Thickness (inches)								Thickness (inches)									
			4	8	12	16	20	24	28	32	4	8	12	16	20	24	28	32		
None Plaster (5/8 in.) on wall			.144	.120	.111	.120	.091	.076	.176	.161	.149	.123	.105	.100	.105	.082	.070	.146	.138	.126
			.135	.114	.108	.114	.088	.073	.164	.152	.141	.117	.103	.097	.103	.082	.067	.141	.129	.120
			.094	.082	.079	.082	.067	.059	.105	.100	.094	.085	.076	.073	.076	.064	.056	.094	.091	.085
			.088	.079	.076	.079	.064	.056	.100	.094	.091	.079	.073	.070	.073	.062	.053	.088	.085	.082
			.085	.076	.073	.076	.064	.056	.097	.091	.088	.079	.070	.067	.070	.059	.053	.088	.082	.079
			.064	.062	.059	.062	.053	.047	.073	.070	.067	.062	.056	.056	.056	.050	.044	.067	.064	.062
			.064	.059	.059	.059	.053	.047	.070	.067	.064	.062	.056	.053	.056	.050	.044	.064	.064	.062
			.085	.076	.073	.076	.064	.056	.097	.091	.088	.079	.070	.067	.070	.059	.053	.088	.082	.079
			.085	.076	.073	.076	.064	.056	.097	.091	.088	.079	.070	.067	.070	.059	.053	.088	.082	.079
			.085	.076	.073	.076	.064	.056	.097	.091	.088	.079	.070	.067	.070	.059	.053	.088	.082	.079
Wood Lath; Plaster			.144	.120	.111	.120	.091	.076	.176	.161	.149	.123	.105	.100	.105	.082	.070	.146	.138	.126
			.135	.114	.108	.114	.088	.073	.164	.152	.141	.117	.103	.097	.103	.082	.067	.141	.129	.120
			.094	.082	.079	.082	.067	.059	.105	.100	.094	.085	.076	.073	.076	.064	.056	.094	.091	.085
			.088	.079	.076	.079	.064	.056	.100	.094	.091	.079	.073	.070	.073	.062	.053	.088	.085	.082
			.085	.076	.073	.076	.064	.056	.097	.091	.088	.079	.070	.067	.070	.059	.053	.088	.082	.079
			.064	.062	.059	.062	.053	.047	.073	.070	.067	.062	.056	.056	.056	.050	.044	.067	.064	.062
			.064	.059	.059	.059	.053	.047	.070	.067	.064	.062	.056	.053	.056	.050	.044	.064	.064	.062
			.085	.076	.073	.076	.064	.056	.097	.091	.088	.079	.070	.067	.070	.059	.053	.088	.082	.079
			.085	.076	.073	.076	.064	.056	.097	.091	.088	.079	.070	.067	.070	.059	.053	.088	.082	.079
			.085	.076	.073	.076	.064	.056	.097	.091	.088	.079	.070	.067	.070	.059	.053	.088	.082	.079

2-in. furring and 1/2-in. plaster (and aggregate) assumed, unless otherwise stated.

HEAT LOSS COEFFICIENTS

TABLE 3. FRAME CEILINGS AND FLOORS

Type of ceiling below joists *		TRANSMISSION LOSS (Watts per sq ft per °F temp diff)				
		None	Wood Subfloor 25/32 in.	Cement (1 1/2 in.) and Ceramic Tile (1/2 in.)	Hardwood Floor (3/4 in.)	Plywood (5/8 in.) and Floor Tile or Linoleum (1/8 in.)
Type of Floor above joists	None	...	.132	.111	.100	.091
	Gypsum Board (3/8 in.)	.190	.088	.079	.070	.062
	Gypsum Lath (3/8 in.); Plaster	.179	.085	.076	.073	.062
	Metal Lath; Plaster (3/4 in.)	.217	.091	.082	.076	.064
	Insulating Board (1/2 in.)	.111	.064	.059	.056	.050
	Insulating Board Lath (1/2 in.); Plaster	.105	.064	.059	.056	.050
	Acoustical Tile (3/4 in.) on Gypsum Board (3/8 in.)	.088	.056	.053	.050	.047
	Acoustical Tile (3/4 in.) on Furring	.097	.062	.056	.053	.050
	Wood Lath; Plaster	.182	.085	.076	.073	.062
	Insulating Board (3/8 in.) and Hard Board (1/4 in.) and Floor Tile or Linoleum (1/8 in.)					

* 1/2 in. plaster (sand aggregate) assumed unless otherwise stated.

Note: Since well-insulated electrically heated structures require a ventilated attic space, the roof construction is normally disregarded and the attic space assumed to be at outside temperature.

TABLE 4. CONCRETE CEILINGS AND FLOORS

Type of Ceiling **		TRANSMISSION LOSS (Watts per sq ft per °F temp diff)									
		No Ceiling	Ceiling Applied Directly to Slab			Suspended Ceiling					
			Plaster (1/8 in.)	Acoustical Tile	Gypsum Board (3/8 in.)	Metal Lath	On Furring or Channels	Acoustical Tile	On Gypsum Board (3/8 in.)	On Gypsum Board (3/8 in.)	On Gypsum Board (3/8 in.)
Type of Finish Floor	Con-crete Deck ** (inches)			1/2 in.	3/4 in.	Without Plaster (3/4 in.)	With Plaster (3/4 in.)	1/2 in.	3/4 in.	1/2 in.	3/4 in.
No finish flooring		.182	.179	.105	.085	.105	.103	.111	.079	.070	.064
Floor tile (asphalt, rubber, plastic, 1/2 in.) or ceramic on terrazzo (1 in.)	4 to 6	.176	.173	.103	.085	.103	.100	.111	.079	.067	.064
Wood block (13/16 in.) on slab		.123	.123	.082	.070	.082	.082	.088	.067	.059	.056
Wood subfloor (29/32 in.); felt, and hardwood (3/4 in.)		.070	.070	.056	.050	.056	.053	.056	.047	.044	.041
No finish flooring		.152	.149	.094	.079	.094	.091	.100	.073	.064	.059
Floor tile (asphalt, rubber, plastic, 1/2 in.) or ceramic on terrazzo (1 in.)	8 to 10	.146	.146	.091	.076	.094	.091	.100	.073	.064	.059
Wood block (13/16 in.) on slab		.108	.108	.076	.064	.076	.073	.079	.062	.056	.053
Wood subfloor (29/32 in.); felt, and hardwood (3/4 in.)		.064	.064	.053	.047	.053	.050	.053	.047	.041	.038

**Plaster and concrete assumed to be of sand aggregate.

HEAT LOSS COEFFICIENTS

TABLE 5. SOLID WOOD DOORS

Nominal Thickness (inches)	TRANSMISSION LOSS (Watts per sq ft per °F temp diff)	
	Exposed Door	With Glass Storm Door*
**	.249	.114
1	.188	.108
1 1/4	.161	.100
1 1/2	.144	.094
1 3/4	.141	.091
2	.126	.082
2 1/2	.105	.076
3	.091	.067

* 50% glass and thin wood panels

** Thin wood panels or single panes of glass

TABLE 6. WINDOWS

Number of Vertical Glass Sheets Type of Sash*	TRANSMISSION LOSS (Watts per sq ft per °F temp diff)		
	Single Glass	Unit-Type Double Glazing	Single Glass with Storm Sash
	Air Space (inches)		
	None	1/4 to 1/2	1 or more
Large glass areas; no sash	.331	.155	---
Wood	.299	.148	.140
Steel	.331	.186	.155
Aluminum	.363	.202	.171

* Windows with sash assumed 80% glass, 20% sash.

TABLE 7. AIR CHANGES

For Estimating Residential Infiltration Heat Loss

Condition	Air Changes per Hour	
	Without Storm Sash or Weather-stripping	With Storm Sash or Weather-stripping
Room with no windows or outside doors	1/2 to 3/4	—
Room with 1 wall exposed	1	1/2
Room with 2 walls exposed	1 1/2	3/4
Room with 3 walls exposed	2	1
Room with 4 walls exposed	2	1
Bath Room	2	2

TABLE 8. CONCRETE FLOOR SLABS (Unheated)

Outdoor Design Temp. (°F)	TRANSMISSION LOSS (Watts per ft of exposed edge)	
	2-inch Edge Insulation*	1-inch Edge Insulation*
- 20 to - 30	14.5	16
- 10 to - 20	13	14.5
0 to - 10	12	13.5

* Insulation should extend 24 inches horizontally under floor; or 24 inches down along the foundation wall below floor level.

TABLE 9. BASEMENT WALLS*

Type of Wall	TRANSMISSION LOSS (Watts per sq ft per °F temp diff)
Concrete or Concrete Block	.02

* For walls 3 ft or more below grade. For portion of walls from 3 ft below to grade level, use factors given in Table 3.

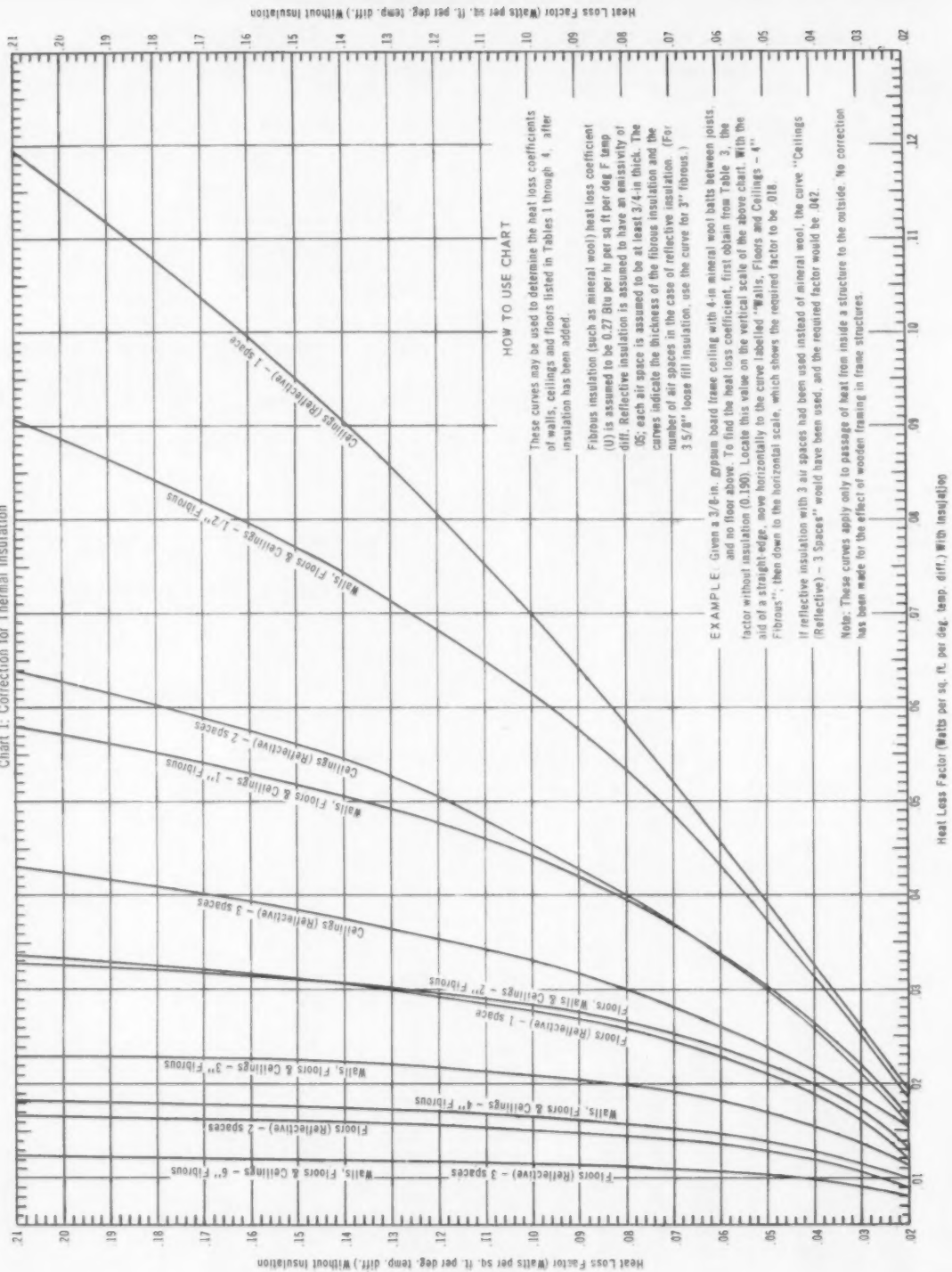
TABLE 10. HEAT LOSS CONVERSION TABLE*

BTU per hr	WATTS	BTU per hr	WATTS	BTU per hr	WATTS	BTU per hr	WATTS	BTU per hr	WATTS
.01	.0029	.21	.062	.41	.120	.61	.179	.81	.237
.02	.0059	.22	.064	.42	.123	.62	.182	.82	.240
.03	.0088	.23	.067	.43	.126	.63	.185	.83	.243
.04	.0117	.24	.070	.44	.129	.64	.188	.84	.246
.05	.0146	.25	.073	.45	.132	.65	.190	.85	.249
.06	.0176	.26	.076	.46	.135	.66	.193	.86	.252
.07	.0205	.27	.079	.47	.138	.67	.196	.87	.255
.08	.0234	.28	.082	.48	.141	.68	.199	.88	.258
.09	.0264	.29	.085	.49	.144	.69	.202	.89	.261
.10	.029	.30	.088	.50	.146	.70	.205	.90	.264
.11	.032	.31	.091	.51	.149	.71	.208	.91	.267
.12	.035	.32	.094	.52	.152	.72	.211	.92	.270
.13	.038	.33	.097	.53	.155	.73	.214	.93	.272
.14	.041	.34	.100	.54	.158	.74	.217	.94	.275
.15	.044	.35	.103	.55	.161	.75	.220	.95	.278
.16	.047	.36	.105	.56	.164	.76	.223	.96	.281
.17	.050	.37	.108	.57	.167	.77	.226	.97	.284
.18	.053	.38	.111	.58	.170	.78	.229	.98	.287
.19	.056	.39	.114	.59	.173	.79	.231	.99	.290
.20	.059	.40	.117	.60	.176	.80	.234	1.00	.293

*Tables 1 through 9 and Chart 1 were computed from data from the 1957 Guide of the American Society of Heating and Air-Conditioning Engineers. For other constructions given in the Guide and not included in these tables, apply the above factors to convert Btu per hr to watts.

HEAT LOSS COEFFICIENTS

Chart 1: Correction for Thermal Insulation

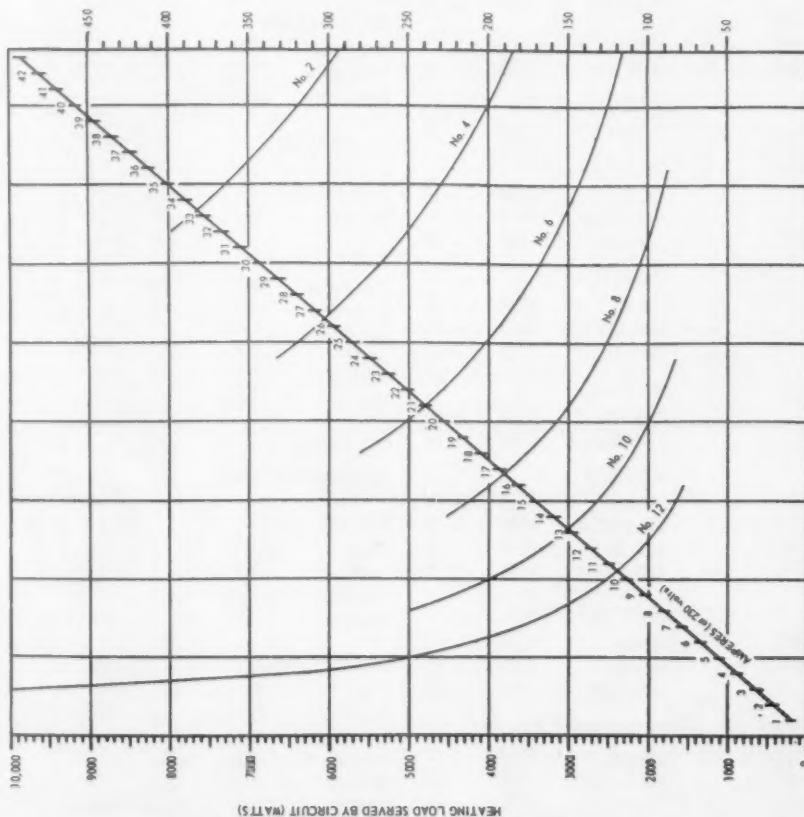


Note: The above curves were plotted from data given in Chapter 9 of the 1957 Guide of the American Society of Heating and Air-Conditioning Engineers.

CHART 2: RECOMMENDED WIRE SIZES AND CIRCUIT LENGTHS FOR ELECTRIC SPACE HEATING CIRCUITS

SIZE OF CONDUCTOR (A.W.G.) - TYPE RH

Scale C	No. 12	No. 10	No. 8	No. 6	No. 4	No. 2
Scale B	No. 12	No. 10	No. 8	No. 6	No. 4	No. 2
Scale A	No. 12	No. 10	No. 8	No. 6	No. 4	No. 2



NOTES

1. If more than one heater is used on a circuit, the N.E.C. limits the total load on the circuit to 24 amps, with a 30-amp maximum overcurrent protective device.
2. For wire Types R or T (or equivalent): Use scales A, B or C at bottom of chart.
3. For wire Type RH (or equivalent): Use scales A, B or C at top of chart.
4. Use Scale A: If the wiring is installed either in heated exterior walls outside of the thermal insulation; or above heated ceilings over thermal insulation at least 2 inches thick; or in walls, partitions or ceilings which do not contain heating equipment.
5. Use Scale B: If any part of the wiring is installed in heated interior walls or partitions.
6. Use Scale C: If any part of the wiring is installed above heated ceilings within the thermal insulation, or above heated ceilings having no thermal insulation.
7. Scales A, B and C may also be used to find required sizes of wiring not connected with the heating system but passing through walls or ceilings as described above.
8. In using chart for 115-volt circuits, follow the procedure described below, but begin with a heating load equal to twice the actual load.

HOW TO USE CHART

Assume load is a 5000-watt, 230-volt heater, the wiring to be entirely in outside walls outside the thermal insulation.

1. Locate heating load (5000 watts) on left hand scale. Using straight-edge, move horizontally to diagonal line, which indicates the current (22 amps).

2. To find the Type RH wire size required, move up from the diagonal to Scale A at top of chart and read wire size (No. 10). If Type R or T is to be used, move down from diagonal and read the wire size (also No. 10) on Scale A at bottom of chart. (See note 4 above.)

3. To find the maximum one-way circuit length to avoid more than 2% voltage drop, go down from the diagonal to the curve representing the wire size selected (No. 10), then horizontally to the right-hand scale, which gives the circuit length (90 feet).

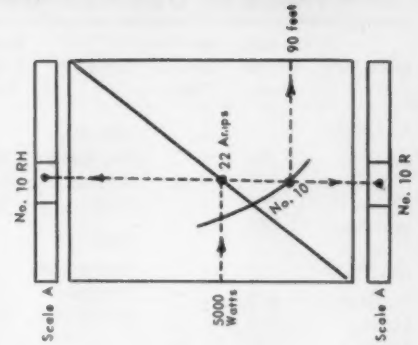


TABLE II. DEGREE-DAYS AND DESIGN TEMPERATURES (°F)

Locality	Annual Degree Days	Outside Design Temp.	Locality	Annual Degree Days	Outside Design Temp.	Locality	Annual Degree Days	Outside Design Temp.	Locality	Annual Degree Days	Outside Design Temp.
ALABAMA			INDIANA			NEVADA			RHODE ISLAND		
Anniston	2820	+ 5	Fort Wayne	6287	- 10	Reno	6036	- 5	Block Island	5843	0
Birmingham	2780	+ 10	Indianapolis	5134	- 10	Winnemucca	6369	- 15	Providence	5607	0
Mobile	1529	+ 15	Terre Haute	5366	- 10	NEW HAMPSHIRE			SO. CAROLINA		
Montgomery	1954	+ 10	IOWA			Concord	7612	- 15	Charleston	1769	+ 15
ARIZONA			Charles City	7504	- 15	NEW JERSEY			Columbia	2284	+ 10
Flagstaff	7525	- 10	Davenport	6091	- 15	Atlantic City	4741	+ 5	Greenville	3060	+ 10
Phoenix	1492	+ 25	Des Moines	6274	- 15	Cape May	4870	0	SO. DAKOTA		
Yuma	951	+ 30	Sioux City	7012	- 20	Newark	5252	0	Huron	7902	- 20
ARKANSAS			KANSAS			Sandy Hook	5369	0	Rapid City	7535	- 20
Fort Smith	3188	+ 10	Concordia	5323	- 10	Trenton	5068	0	TENNESSEE		
Little Rock	2982	+ 5	Dodge City	5058	- 10	NEW MEXICO			Chattanooga	3384	10
CALIFORNIA			Topeka	4919	- 10	Albuquerque	4389	0	Knoxville	3590	0
Eureka	4632	+ 30	Wichita	4571	- 10	NEW YORK			Memphis	3006	0
Fresno	2532	+ 25	KENTUCKY			Albany	6319	- 10	Nashville	3513	0
Los Angeles	1451	+ 35	Louisville	4279	0	Binghamton	6556	- 10	TEXAS		
Red Bluff	2546	+ 25	LOUISIANA			Buffalo	6838	- 5	Abilene	2657	+ 15
Sacramento	2600	+ 30	New Orleans	1175	+ 20	Canton	8305	- 25	Amarillo	4345	- 10
San Diego	1574	+ 35	Shreveport	2117	+ 20	Ithaca	6914	- 15	Brownsville	617	+ 30
San Francisco	3069	+ 35	MAINE			New York	5050	0	Corpus Christi	1011	+ 20
San Jose	2410	+ 25	Eastport	8246	- 10	Oswego	6975	- 10	Dallas	2272	0
COLORADO			Greenville	9439	- 20	Rochester	6863	- 5	Fort Worth	2361	+ 10
Denver	5673	- 10	Portland	7681	- 5	Syracuse	6520	- 10	Houston	1276	+ 20
Grand Junction	5796	- 15	MARYLAND			NO. CAROLINA			Palestine	1980	+ 15
Pueblo	5709	- 20	Baltimore	4203	0	Charlotte	3205	+ 10	Port Arthur	1340	+ 20
CONNECTICUT			MASSACHUSETTS			Raleigh	3075	+ 10	San Antonio	1579	+ 20
Hartford	6139	0	Boston	5791	0	Wilmington	2323	+ 15	UTAH		
New Haven	6026	0	MICHIGAN			NO. DAKOTA			Modena	6598	- 15
D. C.			Detroit	6404	- 10	Bismark	9033	- 30	Salt Lake City	5463	- 10
Washington	4258	0	Grand Rapids	6474	- 10	Devils Lake	9940	- 30	VERMONT		
FLORIDA			Lansing	6982	- 10	Williston	9068	- 35	Burlington	7865	- 10
Apalachicola	1307	+ 25	MINNESOTA			OHIO			VIRGINIA		
Jacksonville	1113	+ 25	Duluth	9574	- 25	Cincinnati	4532	0	Cape Henry	3307	+ 10
Key West	77	+ 45	Minneapolis	7853	- 20	Cleveland	5717	0	Lynchburg	4153	+ 5
Miami	173	+ 35	St. Paul	7804	- 20	Columbus	5277	- 10	Norfolk	3119	+ 15
Pensacola	1435	+ 20	MISSISSIPPI			Dayton	5597	0	Richmond	3720	+ 15
Tampa	674	+ 30	Meridian	2333	+ 10	Sandusky	5859	0	WASHINGTON		
GEORGIA			Vicksburg	2000	+ 10	Toledo	6394	- 10	North Head	5211	+ 20
Atlanta	2811	+ 10	MISSOURI			OKLAHOMA			Seattle	4438	+ 15
Augusta	2138	+ 10	Columbia	5113	- 10	Oklahoma City	3519	0	Spokane	6852	+ 15
Macon	2049	+ 15	Kansas City	4888	- 10	OREGON			Tacoma	4866	+ 15
Savannah	1710	+ 20	St. Louis	4469	0	Baker	7087	- 5	Tatoosh Island	5724	+ 15
IDAHO			Springfield	4693	- 5	Medford	4547	+ 5	W. VIRGINIA		
Boise	5890	- 10	MONTANA			Portland	4143	+ 10	Elkins	5773	- 10
Pocatello	6976	- 5	Havre	8213	- 30	Roseburg	4122	+ 10	Parkersburg	4750	- 10
ILLINOIS			Helena	8126	- 20	PENNSYLVANIA			WISCONSIN		
Cairo	3756	0	Miles City	7850	- 35	Erie	6116	- 5	Green Bay	8259	- 20
Chicago	6310	- 10	NEBRASKA			Harrisburg	5258	0	La Crosse	7650	- 25
Peoria	6087	- 10	Lincoln	5865	- 10	Philadelphia	4523	0	Madison	7300	- 15
Springfield	5225	- 10	North Platte	6546	- 20	Pittsburgh	5048	0	Milwaukee	6944	- 15
			Valentine	7075	- 25	Reading	5060	0	WYOMING		
						Scranton	6047	- 5	Cheyenne	7562	- 15
									Lander	8303	- 20

COMPANY & TRADE NAMES



Alphabetical listing of company names,
trade names and addresses

The following listing contains

- 1 Company names, with complete addresses.
- 2 Company trade names, in capital letters for easy reference.
- 3 Other names by which companies may be or may have been known, cross-referenced to present company.

Trade names are listed solely on the basis of information supplied by the manufacturer and are not guaranteed to be registered or the exclusive property of the manufacturer concerned.

- A**
- A-B—Allen-Bradley Co
A B C—Columbia Cable & Electric Corp
A C Transformer Corp 89 Madison St Newark NJ
ACI—American Coils Co
A C L—Columbia Cable & Electric Corp
ACW—American Cresote Works Inc
AECO—American Electric Cable Co
AFCO—Alhambra Foundry Co Ltd
AFS—AutoFyRstop Co
AG—Farley Co
A G A Div Elastic Stop Nut Corp of America 1027 Newark Ave Elizabeth NJ
A H—Arrow-Hart & Hegeman Electric Co
A J F Industries Inc—see Atlantic Transformer Div
A J New London Instrument Co Inc
A-MAL-GAM—Smith Welding Equipment Corp
AMCO—American Solder & Flux Co
AMP Inc Eisenhower Blvd Harrisburg Pa
APAC—Keesbey & Mattison Co
AOW Corp 450 N Ninth St Elwood Ind
A P Controls Corp—see Controls Co of America
APCO—Aurora Pump Div New York Air Brake Co
A P M—Automatic & Precision Mfg Co
A & R—Air & Refrigeration Corp
A-S—Allen-Stevens Conduit Fittings Corp
ASCO—Automatic Switch Co
A-S-E—All-Steel Equipment Inc
ASMC—Farrelly Co
ATI—Alexander-Tagg Industries Inc
A W H Co—see A W H Co
A-Z—Plastic Wire & Cable Corp
ABELCOR—O'Brien Electric Corp
ABOGLAS—Natar Corp
Abolite Lighting Div Jones Metal Products Co West Lafayette Ohio
ABR-A-SAW—Collins Machinery Corp
Abrams Instrument Corp 606 E. Shawnee St Lansing Mich
Abrams Lighting 3432 Market St Philadelphia 4 Pa
ABSORB-A-SHOCK—Federal Shock Mount Corp
ACCOLITE—Accurate Insulated Wire Corp
ACCORDION—Pullman Vacuum Cleaner Corp
ACCPRENE—Accurate Insulated Wire Corp
ACCTHERM—Accurate Insulated Wire Corp
Accurate Engineering Co 2005 Blue Island Ave Chicago 8 Ill
Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn
Accurate Mfg Co 44 Hepworth Place Garfield NJ
ACCWIRE—Accurated Insulated Wire Corp
ACE—Armature Coil Equipment Inc
ACE—Arro Expansion Bolt Co
Ace Lighting Products Co 230 Eugenia St SW Atlanta 3 Ga
ACHESON—National Carbon Co
ACID-CAUSTIC BAND—Wilbur & Williams Co
Ackerman-Johnson Co 625 W Jackson Blvd Chicago 6 Ill
ACME—Co-operative Utilities Co Inc
ACME—McCaffrey Mfg & Supply Co
Acme Electric Corp 36 Water St Cuba NY
Acme Electric Heating Co 1217 Washington St Boston 18 Mass
Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY
Acme Industries Inc 620 N Mechanic St Jackson Mich
Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif
Acme Lite Products Co Congers NY
Acme Mfg & Gasket Co 738 N 41 St Phila 4 Pa
Acme Steel Co 135th St & Perry Ave Chicago 27 Ill
Acme Welded Pipe & Coil Co—see Acme Industries Inc
Acme Wire Co 1245 Dixwell Ave New Haven Conn
Acorn Insulated Wire Co 36 Freeman St Pawtucket RI
Acoustica Associates Inc 26 Windsor Ave Mineola NY
ACOUTILITE—Neo-Ray Products Inc
Acra Electric Corp 9901 Pacific Ave Franklin Park Ill
Acra Industrial Electric Co—see Acra Electric Corp
ACRATROL—Counter & Control Corp
ACRAWATT—Acra Electric Corp
ACRI-LUMINUS—Luminous Ceilings Inc
ACRO-ARC—Acro Welding Mfg Co
ACRO-ETCH—Acromark Co
ACRO-MAGNETIC—Acro Welder Mfg Co
Acro Welder Mfg Co 1719 W St Paul Ave Milwaukee 3 Wis
Acro Div Robertshaw-Fulton Controls Co 2040 E Main St Columbus 16 Ohio
ACRO INK—Acromark Co
Acro Manufacturing Company—see Acro Div Robertshaw-Fulton Controls
Acro-Mu Switch Div—see Acro Div Robertshaw-Fulton Controls Co
ACROD—Acme Electric Heating Co
ACRODIE—Acromark Co
ACROJET—Acromark Co
ACROLEAF—Acromark Co
ACROM CAST X—Acme Electric Heating Co
Acromark Co 320 Marrell St Elizabeth 4 NJ
ACROMARKER—Acromark Co
ACROMATIC—Acro Welder Mfg Co
ACROPLAC—Acromark Co
ACROPRINTER—Acromark Co
ACROSTAMP—Acromark Co
- ACRYLENS—Lightolier Inc
Active Specialty Corp Elm St Walden NY
ACTOGRAP—Newage Industries Inc
ACUSTI-LUMINUS—Luminous Ceilings Inc
Adapt Mfg Co 14300 Lorain Ave Cleveland 11 Ohio
ADALOV—Adams Engineering Co
Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo
Adams Engineering Co 31711 Solon Rd Solon Ohio
ADAPT-A-LITE—Cable Electric Products Inc
ADAPT-ALL—Beckley Electric Co Inc
ADAPT-O-MOUNT—Overly-Hautz Co
ADAPTA-STUD—Tomic Sales & Engineering Co
ADAPTABEL—Edwards Co Inc
ADAPTAHORN—Edwards Co Inc
ADAPTALITE—MiroFlector Co Inc
ADAPTOMATIC—Feddors Corp
Adcrafters Co 325 W Huron St Chicago 10 Ill
ADD-A-BREAKER—Westinghouse Electric Corp
ADD-A-PHASE—System Analyzer Corp
ADD-A-POINT—Wama Co
ADD-A-TIER—Bernard-Franklin Co Inc
ADD-A-UNIT—Blonder-Tongue Laboratories Inc
ADDA-STRIP—Garco Lighting Div Garden City Plating & Mfg Co
ADDAPLUG—Associated Engineering Corp
ADJUSTO—Adjustable Fixture Co
ADJUSTO-LOC—Adjustable Fixture Co
ADJUST-A-VOLT—Standard Electrical Products Co
ADJUST-ANGLE—Weksler Instrument Corp
ADJUST-O-LITES—Litcraft Mfg Co
ADJUST-O-SPOTS—Litcraft Mfg Co
Adjusta Post Mfg Co 908 St Clair St Akron 7 Ohio
ADJUSTA-PULLEY—Wardedge Co
Adjustable Fixture Co 104 E Mason St Milwaukee 2 Wis
ADJUSTAT—Smith-Gates Corp
ADJUSTO-DECK—Haertel (Walter) Co
ADJUSTO-SLIDE—American Pulley Co
ADJUSTOHM—Ward Leonard Electric Co
Adre Co 8980 W Hawthorne Lane Hales Corners 3 Wis
ADVAN-GUARD—Advance Transformer Co
ADVANCE—Beaver-Advance Corp
ADVANCE—Elgin National Watch Co
Advance Transformer Co 2950 N Western Ave Chicago 18 Ill
Aemco Inc 19 State St Mankato Minn
AERO FAN—Emerson-Pryme Co
Aero Instrument Co 11243 Vanowen St North Hollywood Calif
AERO-MAGNETTE—Heinemann Electric Co
AERODYNE—Jeffrey Mfg Co
Aeroli Products Co Inc 69 Wesley St South Hackensack NJ
Aerolux Electric Lamp Cord—see Aerolux Lights Corp
Aerolux Lights Corp 653 11th Ave New York 36 NY
AEROLYTE—Lightolier Inc
AEROMAC—Seely Instrument Co Inc
Aerovent Fan Co Inc Ash and Block Sts Piqua Ohio
Aetra Motor Products Co—see Pollak (Joseph) Corp
Afco Lite Corp 1224 N Paulina St Chicago 22 Ill
AFTER-GLOW—Perfektite Co
AGASTAT—A G A Div Elastic Stop Nut Corp of America
AGASWITCH—A G A Div Elastic Stop Nut Corp of America
AGLITES—Guth (Edwin F) Co
AGRIIPA—Williams (J H) Co
Ahlberg Bearing Co 3025 W 47th St Chicago 32 Ill
Ainsworth Lighting Inc 38-10 Twenty-Ninth St L I C 1 NY
AIR CONTROL—Hastings Air Conditioning Co Inc
Air Controls Inc 2310 Superior Ave Cleveland 14 Ohio
AIR DUX—Ilumitronic Engineering
AIR-FLOW—Matthews Electric Heater Mfg Co
Air-Hydraulics of Indiana 7769 Lafayette Rd New Augusta Ind
AIR KING—Berns Air King Corp
Air-Marine Motors Inc 369 Bay View Ave Amityville NY
AIR MOVER—Mine Safety Appliances Co
Air & Refrigeration Corp 439 Madison Ave New York City NY
AIR-WAVE—Trade-Wind Motorfans Inc
AIRBOY—Mitchell Industries Inc
Aircraft Marine Products Inc—see AMP Inc
Aircraft Specialties Inc 415 Howard St Lapeer Mich
AIRE-RECTIFIER—Larco Inc
Aifan Engineering Co 7401 Telegraph Rd Los Angeles 22 Calif
AIRLUX—Sun-Lite Mfg Co
AIRMMASTER—Haertel (Walter) Co
AIRMEPEL—Ammerman Co Inc
AIRSEAL—Kearney (James R) Corp
Airservo Mfg Co Inc 435 Melwood St Pittsburgh 13 Pa
AIRSPREAD—Hunter Div Robbins & Myers Inc
Airtemp Div Chrysler Corp 1600 Webster St Dayton 1 Ohio
AIRXPELER—Ammerman Co Inc
AJAX—Security Insert Co
AJAX—Sherwin-Williams Co
Ajax Electric Co 954 Frankford Ave Phila 23 Pa
Ajax Electro Metallurgical Corp—see Ajax Electrothermic Div
Ajax Electrothermic Div Ajax Electrothermic Corp
Ajax Park Trenton 5 NJ
AJAX-HULTGREN—Ajax Electric Co
AJUSTO-SPEDE—Allis (Louis) Co
AKRA-OHM—Shallcross Mfg Co
AI Audio Engineers—O'Brien Electric Corp
- ALABAX—Pass & Seymour Inc
ALADDIN—New England Carbide Tool Co Inc
ALASKAN—National Engineering & Mfg Co
ALBA-LITE—Corning Glass Works
ALBANY—Cooks Sons (Adam) Inc
Albertson & Co Inc 3100 Lowell Sioux City 2 Iowa
Alcar Instruments Inc 17 Industrial Ave Little Ferry NJ
ALCOA—Aluminum Co of America
ALDUTI—S & C Electric Co
ALECTRAL—General Cable Corp
ALEXALL—Boston Woven Hose & Rubber Co
Alexander-Tagg Industries Inc Jacksonville Road at Summit Ave Hatboro Pa
Alexander-Towle Industries—see Alexander Tagg Industries Inc
ALGCO—Auburn Mfg Co
Alhambra Foundry Co Ltd 1147 Meridian Ave Alhambra Calif
ALISCO—Allen Iron & Steel Co
ALISPEDE—Allis (Louis) Co
Alk Co—see Alkco Mfg Co
Alkco Mfg Co 4242 N Lincoln Ave Chicago 18 Ill
ALKENEX—General Electric Co
ALL BEAR—Bell Electric Co
ALL-BRITE—Fluorescent Fixtures of California
All-Brite Light Co 400 S 12 St Reading Pa
ALL-IN-ONE—Beckley Electric Co Inc
ALL-MOTOR—Falk Corp
ALL SQUARE—Guth (Edwin F) Co
All-Steel Welding Alloys Co Inc 249-55 Ferris Ave White Plains NY
All-Steel Equipment Inc Aurora Ill
ALL-VISION—Mine Safety Appliances Co
ALL-WEATHER—Duro-Test Corp
ALL WEATHER—Michigan Fluorescent Light Div
ALL-WEATHER—Mine Safety Appliances Co
ALLADIN—Metalcraft Products Co Inc
Allegheny Plastics Inc Rt 51 & Thorn Run Rd Coraopolis Pa
ALLEN—Excel Electric Service Co Inc
ALLEN—Lint (Clyde W)
Allen (L B) Co Inc 5624 N Newark at Bryn Mawr Chicago 31 Ill
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis
Allen Cooler & Ventilator Inc 704 Woodward St Rochester Mich
Allen Electric and Equipment Co 2101-2117 N Pitcher St Kalamazoo Mich
Allen Iron & Steel Co P O Box 550 Norristown Pa
Allen-Stevens Conduit Fittings Corp 33-53 62nd St Woodside 77 NY
Allen Ventilation Div—see Allen Cooler & Ventilator Inc
Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio
Allied Industries Inc P O Box 119 Opalila Neb
Allied Lightning Protection—see Security Mfg & Contracting Co
Allied Mfg & Sales Co 3101 W Grand Ave Chicago 22 Ill
Allied Precision Industries 425 Stevens St (P O Box 149) Geneva Ill
ALLIGATOR—Porcelain Products Inc
ALLIGATOR JAW—Anderson (Albert & JM) Manufacturing Co
Allis (Louis) Co 427 E Stewart St Milwaukee 1 Wis
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis
ALMAG—Alpha Wire Corp
Almo Mfg Co 119 Sussex Ave Newark 3 NJ
ALNICO—Crucible Steel Co of America
Alpha Metals Inc P O Box 34 Bergen Station 56 Water St Jersey City 4 NJ
Alpha Wire Corp 200 Varick St New York 14 NY
Alphadale Wire & Cable Co 25 Van Dyke Ave (P O Box 709) New Brunswick NJ
ALPHLEX—Alpha Wire Corp
ALTEMP—Alpha Wire Corp
ALTERNAC—Electric Arc Inc
ALTIMATIC—Air-Marine Motors Inc
ALUMALET—Killark Electric Mfg Co
ALUMALLOY—Killark Electric Mfg Co
ALUMATIC—Rich (Phil) Fan Mfg Co Inc
ALUMAWELD—Johnson Mfg Co Inc
ALUMI-DOME—Globe Lighting Products Inc
ALUMINAIRE—McPhibben Mfg Co Inc
Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa
ALUMINUM-GRIP—Preformed Line Products Co
Alwatt Mfg Co 1706 Lapham Dr Modesto Calif
AMADCO—Associated Manufacturers & Distributors Corp
AMAIKCELL—American Electric Cable Co
AMARINE—American Steel & Wire Div United States Steel Corp
AMAZALOV—All-State Welding Alloys Co Inc
AMERCLAD—American Steel & Wire Div United States Steel Corp
Amco Mfg Co 119 Braintree St Boston 34 Mass
AMCDDRUMS—Art Metal Co
AMCOLENS—Art Metal Co
AMER X—American Insulated Wire Corp
AMERAP—American Electric Cable Co
AMBERBESTOS—American Steel & Wire Div United States Steel Corp
AMERCORD—American Steel & Wire Div United States Steel Corp
AMERICAN BEAUTY—American Electrical Heater Co
American Blower Corp—see American Standard
American Caash & Body Co—see McCabe-Powers Body Co
American Coils Co Route 524 Lakewood Rd Farmingdale NJ

- American Concrete Corp 5092 N Kimberly Ave Chicago 30 III
American Coolair Corp 3604 Mayflower St (P O Box 2300) Jacksonville 3 Fla
American Creosote Works Inc 1305 Dublin St (Box 4008) New Orleans 18 La
American Crossarm & Conduit Div A B Chance Co 7726 Sheridan Rd Chicago 26 III
American Electric Cable Co 181 Appleton St Holyoke Mass
American Electric Motors Inc—see American Electronics Inc
American Electric Switch Corp—see American Electric Switch Div
American Electric Switch Div Clark Comptroller Co 1146 E 152 St Cleveland 10 Ohio
American Electrical Heater Co 6110 Cass Ave Detroit 2 Mich
American Electronic Mfg Inc—see American Electronics Inc
American Electronics Inc 655 W Washington Blvd Los Angeles 15 Calif
American Engineering Co Wheatheaf Lane & Sepiva St Philadelphia 37 Pa
American Floor Machine Co 518 S St Clair St Toledo 3 Ohio
American Gas Accumulator Co—see AGA Div Elastic Stop Nut Corp of America
American Hard Rubber Co Ace Rd Butler NJ
American Insulated Wire Corp 36 Freeman St Pawtucket R I
American Lower Co 4240 N Sayre Ave Chicago 34 III
American Lumber & Treating Co—see Koppers Co Inc Wood Preserving Div
American Metal Hose Div—see Anaconda Metal Hose Div
American Metal Moulding Co 146 Colt St Irvington NJ
American Pipe Bending Machine Co Inc Poultney VT
American Pipe Tool Co 4856 W Kinzie St Chicago 44 III
American Products Mfg Co Inc 8127-33 Oleander St New Orleans 18 La
American Pulley Co 4200 Wissahickon Ave Phila 29 Pa
American Rectifier Corp 95 Lafayette St NY 13 NY
American Sealants Co Hartford 6 Conn
American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa
American Silver Co Inc Industrial Div 36-07 Prince St Flushing 54 NY
American Solder & Flux Co 19th & Willard Sts Phila 40 Pa
American Standard Industrial Div Detroit 32 Mich
American Steel & Iron Works 5801 S Lowe Ave Chicago 21 III
American Steel & Wire Div United States Steel Corp Rockefeller Bldg Cleveland 13 Ohio
American Super-Temperature Wires Inc Winoski VT
American Tool & Engineering 2105 Moore St San Diego Calif
American Transom Co—see Security Insert Co
American Vacuum Co 8100 North Ridgeway Skokie III
AMERLOK—American Steel & Wire Div United States Steel Corp
AMERPLASTIC—American Electric Cable Co
AMERPRENE—American Insulated Wire Corp
AMERTHERM—American Insulated Wire Corp
AMERTROL—American Insulated Wire Corp
AMERX—Leviton Mfg Co Inc
AMERY—American Insulated Wire Corp
AMETALLIC—American Steel & Wire Div United States Steel Corp
Ammerman (CL) Co—see Ammerman Co Inc
Ammerman Co Inc P O Box 182 Stillwater Minn
AMP-FRA-LITE—Ampere Industries
AMP-QUARTZ—Ampere Industries
AMP-TRAP—Chase-Shawmut Co
Ampere Industries 60 Boston St Newark 3 NJ
Amprite Co Inc 561 Broadway NY 12 NY
Amplex Corp Glen Cove Rd Carle Place Long Island NY
Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich
Amplex Mfg Co—see Amplex Div Chrysler Corp
AMPLI-SPEED—Electric Machinery Mfg Co
AMPLICALL—Rawland-Borg Corp
AMPLITROL—Thermo Electric Mfg Co
AMPROBE—Pyramid Instrument Corp
AMVAD—Edwards Co Inc
Anaconda Metal Hose Div American Brass Co P O Box 791 Waterbury 20 Conn
Anaconda Wire & Cable Co 25 Broadway New York 4 NY
ANACONDALDY—Anaconda Wire & Cable Co
ANALAC—Anaconda Wire & Cable Co
Anchor Mfg Co P O Box 959 Manchester NH
Anchor Metal Co Inc 966 Meeker Ave Brooklyn 22 NY
Anchor Packing Co 401 N Broad St Philadelphia 8 Pa
Anderson Brass Works—see Anderson Electric Corp
Anderson (A F) Iron Works—see American Steel & Iron Works
Anderson (Albert & JM) Mfg Co 289 A St Boston 10 Mass
Anderson Electric Corp P O Drawer 2151 Birmingham 1 Ala
ANHYDREX—Simplex Wire & Cable Co
ANHYDROPRENE—Simplex Wire & Cable Co
ANKOPRENE—Anchor Packing Co
ANKORITE—Anchor Packing Co
ANKOSEAL—Ansonia Wire & Cable Co
Annis (R B) Co 1101 N Delaware St Indianapolis 2 Ind
ANNOUNCEMAT—Recora Co Inc
ANNULITE—Ramco Lighting Products Inc
ANNUNCIETTE—Edwards Co Inc
Ansonia Electrical Co—see Ansonia Wire & Cable Co
Ansonia Wire & Cable Co 111 Martin St Ashton RI
ANTENAPLEX—Radio Corp of America
ANTENSIFIER—Blonder-Tongue Laboratories Inc
Anthony (F M) Co 773 University Ave Berkeley 10 Calif
ANTI-ARC—Palmer Electric & Mfg Co
ANTI-KORODE—Arco Mfg & Sales Corp
Apex Bolt Products Co 452-458 No Claremont Ave Chicago 12 III
Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY
Apollo Lighting Fixture Co Inc 162 W Third St Mt Vernon NY
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 III
Appleton Rubber Co Inc 57 Cornwall St Boston 30 Mass
AQUA-TEMP—Acra Electric Corp
AQUALUX—Luxor Lighting Products Inc
AQUASORB—Turco Products Inc
AQUATHENE—General Cable Corp
ARC-ESCENT—Luxor Lighting Products Inc
Arco Mfg Co 1701 13th Ave North (Box 817) Grand Fork ND
ARCO WAND—American Vacuum Co
ARCTROL—Mullenbach Div
AERIALUX—Lighting Products Inc
Arex Co 612 N Michigan Ave Chicago 11 III
AREX-AUSTOR—Arex Co
Argo Products Co 1008 N 22 St St Louis 6 Mo
Argo Sales Co—see Argo Products Co
ARGUS—Metalcraft Products Co Inc
Aries Laboratories Inc 45-33 Davis St Long Island City 1 NY
ARIN—Arex Co
ARISTOLITE—Guth (Edwin F) Co
ARITEMP—Aries Laboratories Inc
Arjac Products Inc 55-59 Halstead St Rochester 10 NY
Ark-Lux Switch Corp 51 Water St Watertown Mass
ARK-TROL—Crouse-Hinds Co
ARKLESS—Economy Fuse Div Federal Pacific Elec Co
ARKTITE—Crouse-Hinds Co
Arlavox Mfg Co—Radionic Transformer Co
ARMAKOTE—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
Armature Coil Equipment Inc 2605 Vega Ave Cleveland 13 Ohio
ARMATURO—Johns-Manville
ARMITE—Spaulding Fibre Co Inc
ARMO-LOK—Phelps Dodge Copper Products Corp
Armstrong-Bray & Co 5366 Northwest Highway Chicago 30 III
Armstrong Bros Tool Co 5200 W Armstrong Ave Chicago 30 III
ARRO-CORE—Arro Expansion Bolt Co
Arro Expansion Bolt Co P O Box 388 Marion Ohio
ARROFLUTE—Arro Expansion Bolt Co
Arrolet Corp Foot of Bower St Montgomery Pa
ARROVAL—Arrolet Corp
ARROW—Arrow-Hart & Hegeman Electric Co
Arrow Conduit & Fittings Corp 129 30th St Brooklyn 32 NY
Arrow Electric—see Arrow-Hart & Hegeman Electric Co
Arrow Fastener Co Inc 1 Junius St Brooklyn 12 NY
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn
Arrow Lamps Inc 1270 Broadway New York 1 NY
Arso Mfg & Sales Corp 451 Tenth Ave New York 18 NY
Art Metal Co 1814 E 40 St Cleveland 3 Ohio
Art Specialty Co 3720 N Milwaukee Ave Chicago 41 III
Artcraft Fluorescent Corp—see Artcraft Lighting Co
Artcraft Lighting Co Inc 248 McKibben St Brooklyn 6 NY
ARTIC—Yardney Electric Corp
Artistic Lamp Mfg Co Inc 401 Fourth Ave NY 16 NY
Artolier Corp 139 Main St Lodi NJ
Arto Engineering Co 2757 S 28 St Milwaukee 46 Wis
ASARCOLO—Federated Metals Div American Smelting & Refining Co
ASBESTICA—Johns-Manville
ASBESTOMENT—Johns-Manville
ASBESTON—United States Rubber Co
ASBESTOS EBONY—Johns-Manville
Ascot—Pollak Luminescent Corp
Assembly Products Inc Chestland 31 Ohio
Associated American Trading Div—see Associated American Winding Mach Inc
Associated American Winding Mach Inc 750 St Ann's Ave New York 56 NY
Associated Engineering Corp 65 Kent St Brookline 46 Mass
Associated Manufacturers & Distributors Corp 5015 S E Haig St Portland 6 Ore
Associated Research Inc 3789 W Belmont Ave Chicago 18 III
ASTRA-LITE—Metalcraft Products Co Inc
Athol Machine & Foundry Co 82 South St Athol Mass
Atkomatic Valve Co Inc 545 W Abbott St Indianapolis Ind
Atlantic Engravers Inc 52 Ocean Ave Amityville NY
Atlantic Transformer Co 5143 N 2nd St Phila 20 Pa
Atlantic Transformer Corp—see Atlantic Transformer Div
Atlantic Transformer Div New London Instrument Co Inc
Atlantic Transformer Div New London Instrument Co Inc 30 Hynes Ave Groton Conn
ATLAS—SKF Industries Inc
ATLAS-AIRE—Atlas Tool & Mfg Co
Atlas Asbestos Co North Wales Pa
Atlas E-E Corp 47 Prospect St Woburn Mass
Atlas Electric Products Co 319 Ten Eyck St Brooklyn 6 NY
Atlas Electronics Mfg Co—see Atlas E-E Corp
Atlas Mineral Products Co Mertztown Pa
Atlas Overhead Door Co Mill St at Reading Railroad Quakertown Pa
Atlas Tack Corp Pleasant & South Sts Fairhaven Mass
Atlas Tool and Mfg Co 5147 Natural Bridge Ave St Louis 15 Mo
ATLEE—Atlas E-E Corp
Atlight Lighting Equipment—see Atlas Electric Products Co
ATLITE—Atlas Electric Products Co
AUBESTON—Auburn Mfg Co
Auburn Mfg Co Pease Ave & Stack St Middletown Conn
AUDIOPHONE—Femco Inc
AUDIOSPHERE—Simpson (Mark) Mfg Co Inc
AUDIOTONE—Peschel Electronics Inc
AURORA—Metalcraft Products Co Inc
Aurora Pump Co—Aurora Pump Div New York Air Brake Co
Aurora Pump Div New York Air Brake Co 54 Loucks St Aurora III
Aurum (M B) Co—see Stanco Electric Products Co
AUSTRASTAT—Ward Leonard Electric Co
AUT-N-DOR—Richards-Wilcox Mfg Co
AUTEUX—Willard Storage Battery Div Electric Storage Battery Co
Auth Electric Co Inc 34-20 45th St L I C 1 NY
Auth Electrical Specialty Co Inc—see Auth Electric Co Inc
AUTHOTONE—Auth Electric Co Inc
Auto Arc-Weld Mfg Co 9615 Meach Ave Cleveland 5 Ohio
AUTO-BLOCK—Round (David) & Son Inc
AUTO-PHONE—Couch (S H) Co Inc
AUTO REG—C & D Batteries Inc
Autocal Co 58 Warden Ave Shelby Ohio
AUTOCON—Automatic Control Co
AUTODYNE—Westinghouse Electric Corp
AUTOFLEX—Universal Metal Hose Co
AutoFyrstop Co 2035 Washington Ave Phila 46 Pa
AUTOGAP—Hubbard & Co
Automatic Control Co 995 University Ave St Paul 4 Minn
Automatic Devices Co Inc 714 Hillgrove Ave Western Springs III
Automatic Electric Co Northlake III
Automatic Electric Mfg Co—see Aemco Inc
Automatic & Precision Mfg Co 252 Hawthorne Ave Yonkers 5 NY
Automatic Products Co—see Controls Co of America
Automatic Switch Co 50-56 Hanover Rd Floram Park NJ
Automatic Transportation Co 101 W 87th St Chicago 20 III
Automatic Vulcanizers Corp 16 Hudson St New York 13 NY
Automation Products Inc 3030 Max Roy St Houston 24 Tex
AUTOMATOR—Marathon Electric Mfg Corp
AUTORESET—AutoFyrstop Co
AUTOSSET—Stromberg Time Corp
AUTOSPEED—Stromberg Time Corp
AUTOSTATIC—Lake Shore Electric Corp
Autotron Inc 3629 N Vermilion St Danville Ind
AUTOVALVE—Westinghouse Electric Corp Lamp Div
AVERNARIUS CARBOLINEUM—Carbolineum Wood Preserving Co
AVIGATOR—Mitchell Industries Inc
Avion Div ACF Industries Inc 11 Park Pl Paramus NJ
AXIALFLOW—Westinghouse Electric Corp Sturtevant Div
AXIFLO—Westinghouse Electric Corp
AXIVANE—Joy Mfg Co

B

- B-LINE—Black (M) Mfg Co
BAC—Ettco Wire & Cable Corp
BBB—Becker Bros Carbon Co Inc
BD—Beede Electrical Instrument Co Inc
BEO—Westinghouse Electric Corp
BEKO—Balance Engineering Co
BFC—Bernard-Franklin Co Inc
B M—Briegleb Method Tool Co
B & M Electric Corp 168 7th St Brooklyn 15 NY
B M & D—B M D & R Inc
B M D & R Inc 7020 Walker St St Louis Park Minneapolis 16 Minn
B-T LABS—Blonder-Tongue Laboratories Inc
BTC—Berkshire Transformer Corp
BTC—Brewer-Tichenor Corp

BTC—Bush Transformer Corp
BVI—Burgess Vibrocrafters
B/W Controller Corp 2200 E Maple Rd Birmingham Mich
BABY-COM—Faxon Electronic Industries Inc
BADGER—Reliance Automatic Lighting Co
Badger Die Casting Corp 201 W Oklahoma Ave Milwaukee 7 Wis
Bahanson Co 1001 S Marshall St Winston-Salem NC
Bailey Meter Co 1050 Ivanhoe Rd Cleveland 10 Ohio
Baker-Barkon Co 1335 S W Morrison St Portland Ore
Baker Perkins Inc Saginaw Mich
Baker-Ross Inc 602 W McCarty St Indianapolis 6 Ind
BALANCE—Self-Lifting Piano Truck Co
Balance Engineering Co 5030 W Lake St Chicago 44 Ill
BALCO—Driver (Wilbur B) Co
BALD HEAD—Blackhawk Mfg Co
Baldor Electric Co 4353 Duncan Ave St Louis 10 Mo
ALL-RITE—Cummins Portable Tool Div John Oster Mfg Co
BALLLOTTE—Line Material Industries
Baltimore Co Lincoln & Garfield Aves West Chester Pa
BAND-ROD—Sherman (H B) Mfg Co
BANNER-AIRE—Argo Products Co
BANTAM—American Rectifier Corp
BANTAM—Small Motors Inc
BANTAM-BIN-DICTATOR—Bin-Dicator Co
Bar-Brook Mfg Co Inc 6133-35 Linwood Ave Shreveport La
Barber-Colman Co P O Drawer 99 Rockford Ill
Barber Electric Mfg Co Inc 30 Chestnut St N Attleboro Mass
Barber-Greene Co 400 N Highland Ave Aurora Ill
Barbour (J E) Co—see Ludlow Mfg & Sales Co
Barkewell Electric Mfg Co 1905 Columbia Ave Middletown Ohio
Barkon-Frink Tube Lighting Corp—see Frink Corp
Barksdale Valves 5125 Alcoa Ave Los Angeles 58 Calif
BARN-FLEX—Paranite Wire & Cable Div Essex Wire Corp
Barrett Varnish Co 1532 S 50th Ct Cicero 50 Ill
Barry Corp—see Barry Controls Inc
Barry Controls Inc 733 Pleasant St Watertown Mass
BARRYMOUNT—Barry Controls Inc
Bar Corp 12650 Brookpark Rd Cleveland 30 Ohio
Barth Stamping & Machine Works—see Barth Corp
Bartlett Mfg Co 3003 E Grand Blvd Detroit 2 Mich
Bashlin (W M) Co Bashlin Bldg Grove City Pa
BASIC UNIT—Electro Lighting Corp
BATCHMATIC—Barker-Greene Co
BATTERY KEEPER—Reel Metal Craft Inc
BATTERY SCOPE—Christie Electric Corp
BAUER—Mission Appliance Corp
Bauer Electric—see Mission Appliance Corp
BEACON RAY—Federal Sign & Signal Corp
BEAM-O-MATIC—J-C Lite Mfg Co
BEAUTY TONE—Westinghouse Electric Corp Lamp Div
Beaver-Advance Corp 12th & Factory Sts Ellwood City Pa
Beaver Art Metal Corp—see Beaver-Advance Corp
Beaver Pipe Tools Inc 310 Dana Ave N E Warren Ohio
Becker Bros Carbon Co 3450 So Laramie Ave Cicero 50 Ill
Becker Bros Electrical Corp—see Ther Electric & Machine Works
Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY
Beede Electrical Instrument Co Inc Penacook New Hampshire
BELCAP—Sprague Electric Co
BELCO—Bell Electric Co
BELCO—Bogue Electric Mfg Co
BELCON—Bogue Electric Mfg Co
BELDBOND—Belden Mfg Co
Belden Mfg Co P O Box 5070A Chicago 80 Ill
BELDENAMEL—Belden Mfg Co
BELDFOIL—Belden Mfg Co
BELDONLITE—Stamford Metal Specialty Co Inc
BELDSOL—Belden Mfg Co
BELDITHERM—Belden Mfg Co
Bell Electric Co 5735 S Claremont Ave Chicago 36 Ill
Bell Lumber & Pole Co 524 Midland Bank Bldg Minneapolis 1 Minn
Bell Pole Co Ltd—see Bell Lumber & Pole Co
Bell Sound Systems Inc 555 Marion Rd Columbus 7 Ohio
Bellevue Industrial Furnace Co 2620 Crane Ave Detroit 14 Mich
BELLOFRAM—General Control Co
BELT-AIR—Buffalo Forge Co
BELTA—Diamond Expansion Bolt Co Inc
Benbow Mfg Co—see Insul-8 Corp
BENCO—Benjamin Electric Mfg Co
BENFIELD—Steelcraft Co
Benjamin Electric Mfg Co Northwest Highway & Siegers Rd Des Plaines Ill
Benjamin Reel Products Inc 10700 Broadway Cleveland 25 Ohio
Benson (Alexander R) Co Inc 2 Davis Rd New Hartford NY
BERALDY—Driver (Wilbur B) Co
Bergen Laboratories 247 Crooks Ave Clifton NJ
Berko Electric Mfg Corp 212-40 Jamaica Ave Queens Village 28 NY
Berkshire Laboratories 942 Bank Village Greenville S.C.
Berkshire Transformer Corp Kent Conn
BERMICO—Brown Co
Bernard-Franklin Co Inc Hedley & Balfour Sts Phila 37 Pa
Bernina Sewing Machine Co 29 W 35 St N Y 1 NY
Berns Air King Corp 3050 N Rockwell St Chicago 37 Ill
Bernz (Otto) Co Inc Driving Park & Ramona Rochester 13 NY
BERNZ-O-MATIC—Bernz (Otto) Co Inc
BERNZRITE—Bernz (Otto) Co Inc
Berry (William B) Co 117 Causeway St Boston 14 Mass
Bertram (Harvey P) Co 2225 Bogen St Cincinnati Ohio
BESTO-WIRE—Rhode Island Insulated Wire Co Inc
Beverly Shear Mfg Co 3023 W 111 St Chicago 43 Ill
BI-FLO—Aerovent Fan Co Inc
BI-PRENE—Bishop Mfg Co
BI-SEAL—Bishop Mfg Corp
Biddle (James G) Co 1316 Arch St Phila 7 Pa
Biddle Trade Publishing Co 2720 Beverly Blvd Los Angeles 57 Calif
BIFURCATOR—DeBothezat Fans Div American Machine & Metals Co
BIG BEAM—U-C-Lite Mfg Co
BIG CHAMP—Champion DeArment Tool Co
BIGRED—Waco Mfg Co
BILGER—Self-Lifting Piano Truck Co
Billings & Spencer Co 1 Laurel St Hartford 1 Conn
BILT-IN—Thermador Electrical Mfg Co
Bin-Dicator Co 13946 Kercheval Ave Detroit 15 Mich
BIN-EYE—Jeffrey Mfg Co
BIN-FLO—Bin-Dicator Co
BIN-VUE—Control Co of America
Bios Laboratories Inc 17 W 60 St New York 23 NY
Birdsell Mfg Co Inc 750 San Antonio Rd Palo Alto Calif
Bishop Mfg Corp 10 Canfield Rd Cedar Grove NJ
BLACK BEAUTY—Texas Cressoting Co
Black (M) Mfg Co 300-08 N Third St Phila 6 Pa
Black & Decker Mfg Co Towson 4 Md
BLACK LINE—Black (M) Mfg Co
Blackburn (Jasper) Corp 1525 Woodson Rd St Louis 14 Mo
Blackburn Specialty Co—see Blaco Mfg Co
Blackhawk Industries 250 S Main St Dubuque Iowa
Blackhawk Mfg Co 5325 W Rogers Milwaukee 46 Wis
Blaco Mfg Co 6541 Euclid Ave Cleveland 3 Ohio
BLAKE—Couch (S H) Co Inc
Bliss Electronic Corp Sussex NJ
Blitz Electric Co 5713 Wentworth Ave Chicago 21 Ill
BLO-FAN—Emerson-Pryne Co
Blonder-Tongue Laboratories Inc 9-25 Ailing St Newark 2 NJ
Blower (L R) Co—see Ripley Co Inc
BLU-RED—Associated American Winding Mach Inc
BLUE BONNET—Forston Co
BLUE BRUTE—Worthington Corp
BLUE DIAMOND—Pioneer Gen-E-Motor Co
BLUE DIAMOND—Whitman & Barnes Div United Drill & Tool Corp
Blue M Electric Co 138th & Chatham Sts Blue Island Ill
Bodendieck Tool Co P O Box 499 Taylorville Ill
Bodine Electric Co 2500 W Bradley Pl Chicago 18 Ill
Bogen (David) Co Inc—see Bogen-Presto Co
Bogen-Presto Co Route 4 & Forest Ave (P O Box 500) Paramus NY
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ
BON-E-CON—Bonney Forge & Tool Works
BONDEZE—Phelps Dodge Copper Products Corp
Bonnell (Wm A) Co—see Bonnell Electric Mfg Co Inc
Bonnell Electric Mfg Co Inc 192-194 Chambers St New York 7 NY
Bonnell Electrical Specialties—see Bonnell Electric Mfg Co Inc
Bonney Forge & Tool Works 2400 Rockhill Rd (North) Alliance Ohio
Borden Co—see Beaver Pipe Tools Inc
Borden Engineering Co—see Borden Engineering Div
M J Johnson Aircraft Engineering Co
Borden Engineering Div M J Johnson Aircraft Engineering Co Box 10 Morrisstown NJ
BORNISIL—Westinghouse Electric Corp
BOROHM—Shallcross Mfg Co
Borthig (George C) Co Inc P O Box 115 East Rutherford NJ
BOSS—Huenefeld Co
Boston Gear Works 14 Hayward St Quincy 71 Mass
Boston Woven Hose & Rubber Co P O Box 1071 Boston 3 Mass
Bound Brook Oil-Less Bearing Co Bound Brook NJ
Bowers Battery & Spark Plug Co Box 1262 Reading Pa
Bowers Mfg Co Inc 6700 Avalon Blvd Los Angeles 3 Calif
BOX-LOK—Metallectrics Inc
Brach Mfg Corp 200 Central Ave Newark 3 NJ
Bradley Laboratories Inc—see Bradley Semiconductor Corp
Bradley Semiconductor Corp 275 Welton St New Haven 11 Conn
Brady (WH) Co 727 W Glendale Ave Milwaukee 4 Wis
Brady Milwaukee Co—Brady (W H) Co
Brand (William) & Co Inc 51 North St Willimantic Conn
Brand Dielectrics 57 North St Willimantic Conn
Brandham Marek & Duesner Inc—see B M D & R Inc
BRASCOLITE—Guth (Edwin F) Co
BRAZALOY—All-State Welding Alloys Co Inc
BRAZECLAD—American Silver Co Inc
BREEZE-AIR—Buffalo Forge Co
BREEZE BUILDER—Bar-Brook Mfg Co Inc
BREEZO—Buffalo Forge Co
Breuer Electric Mfg Co 5100 N Ravenswood Ave Chicago 40 Ill
Brewer-Titchener Corp 111 Port Watson St Cortland NY
Bridgeport Hardware Mfg Corp Scofield Ave Bridgeport 5 Conn
Briegleb Method Tool Co 104 N E First St Galva Ill
Bright Star Battery Co—see Bright Star Industries
Bright Star Industries 600 Getty Ave Clifton NJ
Bristol Motor Div Vocaline Co of America Inc Coulter St Old Saybrook Conn
BRITE BEAM—Lightalarms Inc
Broan Mfg Co Inc Hartford Wis
BRONCO—Western Insulated Wire Co
BRONCOBESTON—Western Insulated Wire Co
Bronze Bearings Inc 340 N Ave East Cranford New Jersey
Brook Motor Corp 3302-4 W Peterson Ave Chicago 45 Ill
BROOKS—Mine Safety Appliances Co
Brooks Lumber Co P O Box 153 Bellingham Wash
Brown Company 150 Causeway St Boston 14 Mass
BROWN DEVIL—Ohmite Mfg Co
Brown Instrument Co—see Minneapolis-Honeywell Regulator Co Industrial Div
Brown Instrument Div—see Minneapolis-Honeywell Regulator Co Industrial Div
Brown Products Corp 1090 Springfield Rd Union NJ
Brown Wood Preserving Co 409 Commonwealth Bldg Louisville 2 Ky
BROWN-X—Pass & Seymour Inc
BROWNING—Potter & Rayfield Inc
Brundage Co 48 Hale St Cranford New Jersey
Brunswick Instruments P O Box 813 New Brunswick NJ
BRUNT—Brundage Co
Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn
Bryant Mfg Co 410 N Paulina St Chicago 22 Ill
Buchanan Electrical Products Corp 420 U S Route 22 Hillside NJ
Buckels (Chris) Inc 2300 S Springfield Ave Chicago 23 Ill
BUCKEYE—Youngstown Sheet & Tube Co
BUDGET-LITES—Littercraft Mfg Co
BUDGETLITE—Ainsworth Lighting Inc
Buffalo Forge Co 490 Broadway Buffalo 5 NY
Buffalo Machine Mfg Co 586 Tonawanda St Buffalo 7 NY
BUG-A-WAY—Westinghouse Electric Corp Lamp Div
BUG CHASER—Amplex Corp
BUILDERS—Stanley Electric Tools
Building Service Co 4923 18th Ave Minneapolis 17 Minn
BUILT-IN-WATCHMAN—Westinghouse Electric Corp
BUILT-TOGETHER—Fairbanks Morse & Co
BULL DOG—Boston Woven Hose & Rubber Co
BULL DOG—Marvel Lamo Co
BULLDOG—Mid-States Welder Mfg Co
Bulldog Electric of Denver—see Young Electric & Mfg Co Inc
Bulldog Electric Products Co—see Bulldog Electric Products Div
Bulldog Electric Products Div J-T-E Circuit Breaker Co 7610 Joseph Campau Detroit Mich
BULLS-I-UNIT—Kirkland (H R) Co
Bunnell (G F) Co—see Atlantic Engravers Inc
Bunting Brass and Bronze Co 715 Spencer St Toledo 1 Ohio
Burbank Electrical Products 215 W Palm Ave P O Box 7 Burbank Calif
Burgess Battery Co Handi Craft Div—see Burgess Vibrocrafters
Burgess Battery Co Freeport Ill
Burgess Vibrocrafters Grayslake Ill
Burling Instrument Co Inc 16 River Rd Chatham NJ
BURLINGTON—Miller Co
Burndy Corp Norwalk Conn
Burnley Battery & Mfg Corp 103 Clay St (P O Box 511) North East Pa
Burns (James F) Co 705-715 Cherry St Philadelphia 6 Pa
Burr Aluminum Products Div—see Keyes-Davis Co
Burt Mfg Co 936 S High St Akron 11 Ohio
Burton Mfg Co 2520 Colorado Ave Santa Monica Calif
Burton-Rogers Co 42 Carleton St Cambridge 42 Mass
Busada Mfg Corp 58-59 54th St Maspeth 78 NY
Bush Transformer Corp 707 North St Endicott NY
Bush TX Corp—see Bush Transformer Corp
BUSHBUTTON—White-Rodgers Co
BUSHEND—Buchanan Electrical Products Corp
BUSS—Bussman Mfg Div McGraw-Edison Co
Bussman Mfg Div McGraw-Edison Co University at Jefferson St Louis 7 Mo
BUSTER—Lidsen of North Carolina Inc
BUSTRIUTION—Bulldog Electric Products Div I-T-E Circuit Breaker Co

BUTTIN—Burdoy Corp
BUZABEL—Edwards Co Inc
BUZACALL—Edwards Co Inc

C

C & B Engineering and Fabricating Corp P O Box 8701
Houston Tex
CBC Electronics Co Inc 2601 N Howard St Phila-
delphia 33 Pa
CBS—Hytron Div Columbia Broadcasting System Inc
100 Endicott St Danvers Mass
CCA—Coil Co of America Inc
C & D Batteries Inc Conshohocken Pa
CDM—Curtis Development & Mfg Co
C&E—Ericson Mfg Co
CFI—Day-Brite Lighting Inc
C-H—Cutler-Hammer Inc
C-I BOARD—Century Lighting Inc
C-LECTOR—Century Lighting Inc
C-L-X—Simplex Wire & Cable Co
C M—Chicago Miniature Lamp Works
CM—Chisholm-Moore Hoist Div Columbus McKinnon
Chain Corp
C N M—Conduit Nipple Mfg Co
COM—Wing (L J) Mfg Co
C P—Chicago Pneumatic Tool Co
C-Q-T—Chase-Shawmut Co
C-RITE—Dependable Electric Mfg Co Inc
C T R—Cincinnati Time Recorder Co
C & W Sales Co—see Clark (George P) Div Cregin &
Wilkins Co Inc
CWC Corp—see Crozier Machine Tool Co
CABINETROL—General Electric Co
Cable Electric Products Inc 234 Daboll St Provi-
dence 7 R
CABLEMATIC—Wii-Son Mfg Co
CABLERACK—Chalfant Products Co Inc
CABLETRAY—Chalfant Products Co Inc
CABLETROF—P-W Industries Inc
CABLETROUGH—Chalfant Products Co Inc
CABLEX—Collier Insulated Wire Co
CADDY—Erico Products Inc
CADET—Guth (Edwin F) Co
CADET—Linemaster Switch Corp
CADILLAC—Clements Mfg Co
CADILLAC—Waveland Electric Co
CADWELL—Erico Products Inc
CAL-MATIC—North Shore Nameplate Inc
CALCULITE—Lightolier Inc
CALIFONE CORP 1041 N Sycamore Ave Hollywood
38 Calif
California Reinforced Plastics Co—see Hexcel Products
Inc
CALK-INS—Rawlplug Co Inc
Calpa Products Co 5420 Paschal Ave Phila 42 Pa
CALSUM BRONZE—Anaconda Wire & Cable Co
CALTRON—Caltron Products Co
Caltron Co—see Caltron Products Co
Caltron Products Co 3518 W Pico Blvd Los Angeles
19 Calif
Calumet Plastics Inc 11201 S Cottage Grove Ave
Chicago 28 Ill
Calvert Co 19851 Ingersoll Dr Rocky River 16
Ohio
Cam-Lok Div Empire Products Inc 9201 Blue Ash
Rd (Box 98) Cincinnati 36 Ohio
CAM-VAR—Electro-Technical Products Div
Cambridge Corp 825 Bronx River Ave New York 72
NY
CAMBRICOID—American Electric Cable Co
CAMEO—Rodale Mfg Co Inc
Can Arm Corp P O Box 156 Champlain NY
CANDELITE—Duro-Test Corp
CANDELECTRIC—Hunter Div Robbins & Myers Inc
CANDEFLAME—North American Electric Lamp Co
CANDYLBEAR—North American Electric Lamp Co
Canning-Pekara Inc 2144 N Wood St Chicago 14 Ill
Cannon Electric Co 3208 Humboldt St Los Angeles
31 Calif
Cannon Electric Development Co—see Cannon Electric
Co
CANSEAL—Cannon Electric Co
CAPAC—Englehard (Charles) Inc
CAPACOMETER—Simmons Electric Co
CAPCO—Capitol Stage Lighting Co Inc
CAPCOLITE—Capitol Stage Lighting Co Inc
Capewell Mfg Co 60170 Governor St Hartford 2
Conn
CAPILLARY—Air & Refrigeration Corp
Capitol Hardware Mfg Co Inc 400 N Leavitt St Chi-
cago Ill
Capitol Stage Lighting Co Inc 527 W 45 St New
York 36 NY
CAPRI—Benjamin Electric Mfg Co
CAPRI—Frigid Inc
CAPRI—Swiveller Co Inc
Capron Mfg Co 2565 W Fullerton Ave Chicago 47
Ill
CARBI-TWIST—U S Expansion Bolt Co
Carbolite Co 32 Hanley Industrial Ct St Louis 17
Mo
Carbolite Wood Preserving Co 6683 N 40 St Mil-
waukee 9 Wis
CARBOLON—Carbone Corp
CARBOLUX—Carbone Corp
CARBOMITE—Continental Carbon Div of Wirt Co
Carbon Engineering Corp P O Box 256 Slinger Wis
Carbone Corp 400 Myrtle Ave Boonton NJ
CARECO—Carbon Engineering Co
CARGOLITE—Stebber Mfg Co

Carlite & Doughty Inc—see C & D Batteries Inc
CARLON—Hudson Lamp Co
Carney (B J) & Co 411 Peyton Bldg Spokane 8
Washington
Carol Cable Co 190 Middle St Pawtucket RI
CAROPRENE—Carol Cable Co
Carpenter Mfg Co 2250 Bradley St Somerville 45
Mass
Carrier Corp Carrier Parkway Syracuse 1 NY
Carter (R L) Co—see Stanley Electric Tools
Carter Motor Co 2711 W George St Chicago 18 Ill
CARTON—Self-Lifting Piano Truck Co
CARTRIJ-DRY—Pyramid Electric Co
CASEAMATIC—Alliance Mfg Co Inc
Castle Engineering Co P O Box 35 Seneca Castle
NY
Castle Hills Corp—see Hartzell Propeller Fan Co
CASTOHM—Shallcross Mfg Co
CASTOMATIC—Federated Metals Div American Smelt-
ing & Refining Co
CATALINA—Benjamin Electric Mfg Co
CATALINA—Industrial Lamp Corp
CATALINA—Swiveller Co Inc
CATARACT—Ajax Electric Co
Caterpillar Tractor Co Engine Div Abington & N
Perry Sts Peoria Ill
Catholic Protection Service 4601 Stanford St Hous-
ton Tex
Catholics Inc—see Cold Cathode Lighting Corp
CAVALIER—Wakefield Co Inc
Cavalier Air Conditioning Co—see Forston Co
Cavalier Corp Electric Heating Div 343 W First St
Chattanooga Tenn
Ceco Steel Products Corp 5601 W 26 St Chicago 50
Ill
CEFCO—Commercial Enclosed Fuse Co of NJ
Ceilheat Inc 5212 Homberg Drive Knoxville Tenn
CEILO—Gibson Mfg Co
CELENAMEL—Belden Mfg Co
CEMCO—Connecticut Electric Mfg Co
CEMCO—Central Scientific Co
CENTAWATT—Westix Electric Heater Co
CENTRA-POWER—General Electric Co
Central Neon Co—Centralite Co Inc
Central Porcelain Co 507 Railroad St Columbiana
Ohio
Central Scientific Co 1700 Irving Pk Rd Chicago 13
Ill
Central Station Signals Inc 53 W 23 St New York
10 NY
Central Transformer Co 900 W Jackson Blvd Chicago
7 Ill
Central Transformer Corp P O Box 687 Pine Bluff
Ark
Centralite Co Inc Dayton & Central Aves Cincinnati
14 Ohio
CENTRI-CORE—Alpha Metals Inc
CENTRAL—Nelson Electric Mfg Co
CENTRON—Sunbeam Lighting Co
Century Electric Co 1806 Pine St St Louis 3 Mo
Century Fan & Ventilator Co 45 Cedar St Stamford
Conn
Century Lighting Inc 521 W 43 St New York 46
New York
CERAMAGNET—Stackpole Carbon Co
Ceramic Specialties Co—see Lint (Clyde W)
CERTAIN CURTAIN—Hayes (C I) Inc
Certified Ballasts Mfrs—see Fleur-O-Lier Mfrs
CESCO—Code Equipment Sales Co
Chadsey Corp P O Box 1858 Hartford 1 Conn
Chadsey Mfg Co Inc—see Chadsey Corp
Chain Belt Co 4701 W Greenfield Ave Milwaukee 1
Wis
CHAIN MATE—Radix Wire Co
CHAIN-O-LITE—House-O-Lite Corp
Chaifant Products Co Inc 11525 Madison Ave Clevel-
and 2 Ohio
CHALKBOARD—Solar Light Mfg Co
CHALLENGER—Bogen-Presto Co
CHALLENGER—Coffing Hoist Div Dug-Norton Co
CHAMCO—Chalfant Products Co Inc
Chamur Mfg Corp 43-63 11th St Long Island City 1
NY
CHAMPION—Turner Brass Works
CHAMPION—Winpower Mfg Co
Champion DeArment Tool Co South Main St Mrid-
ville Pa
Champion Lamp Works 330 Lynnway Lynn Mass
Champion Mfg Co—see Winpower Mfg Co
Chance (A B) Co 210 N Allen St Centralia Mo
Chandeysson Electric Co 4084 Bingham Ave St
Louis 16 Mo
CHANGE-A-CYCLE—Carter Motor Co
CHANGE-A-VOLT—Carter Motor Co
CHANGE-OUT—Joy Mfg Co
CHANNEL-DUCT—Glastic Corp
CHANNELITE—Swiveller Co Inc
CHANNELLOCK—Champion DeArment Tool Co
Chapin (Chas E) Co Inc 227 Fulton St New York 7
NY
Chapman (PE) Electrical Works Inc 1820 Chouteau
Ave St Louis 3 Mo
CHARCO—Charleston Rubber Co
CHARG-O-MATIC—Hertner Electric Co
CHARGAMATIC—Electric Cord Co
CHARGE-A-PACK—Electric Service Systems Inc
CHARGE CONTROL—Exide Industrial Div
CHARGICATOR—Hickok Electrical Instrument Co
Charles Machine Works Inc P O Box 66 Perry Okla
Charleston Rubber Co Stark Industrial Park Charles-
ton SC
CHASBESTOS—Chase & Sons Inc
CHASE—Thomas & Betts Co

Chase Brass & Copper Co Inc 236 Grand St Water-
bury 20 Conn
CHASE-COTE—Chase & Sons Inc
Chase-Shawmut Co 374 Merrimack St Newburyport
Mass
Chase & Sons Inc 26 Spruce St North Quincy Mass
CHEERLIGHT—Aerolux Lights Corp
Chelsea Fan and Blower Co 639 South Ave Plain-
field NJ
Chemalloy Electronics Corp Gillespie Field Santee
Calif
Cherry Electrical Products Corp 1650 Deerfield Rd
Highland Park Ill
Chesflex Corp 684 Nepperhan Ave Yonkers NY
Chester Cable Corp Oakland Ave Chester NY
Chester Hoist Div National Screw & Mfg Co Lisbon
Ohio
Chester Mfg Co—see Chester Hoist Div National
Screw & Mfg Co
CHICAGO—Klein (Mathias) & Sons
CHICAGO—Lidsen of North Carolina Inc
Chicago Blower Corp 9867 Pacific Ave Franklin
Park Ill
Chicago Commutator Inc Wheeling Rd & Exchange Ct
Wheeling Ill
Chicago Decalcomania Co 3310 Elston Ave Chicago
18 Ill
Chicago Die Casting Mfg Co 2510-14 W Monroe St
Chicago 12 Ill
Chicago Metal Hose Corp—see Flexicon Corp
Chicago Miniature Lamp Works 1500 N Ogden Ave
Chicago 10 Ill
Chicago Pneumatic Tool Co 6 E 44 St NY 17 New
York
Chicago Roller Skate Co—see Ware Fuse Corp
CHICAGO-SIGNAL—Couch (S H) Co Inc
Chicago Tubing & Braiding Co—see Flexicon Corp
Chicago Wire Iron & Brass Works 2411 W Belmont
Ave Chicago 18 Ill
CHIEF—Collins Machinery Corp
CHILCO—Chicago Miniature Lamp Works
CHILL AIR—National Engineering & Mfg Co
CHINALAK—Dolph (John C) Co
Chisholm-Moore Hoist Corp—see Chisholm-Moore Div
Columbus McKinnon Chain Corp
Chisholm-Moore Hoist Div Columbus McKinnon Chain
Corp 6072 Fremont Ave Tonawanda NY
CHLOREXTOL—Allis-Chalmers Mfg Co
CHLOROLUX—Luxor Lighting Products Inc
CHORDETTE—Edwards Co Inc
CHORE BOY—Allis-Chalmers Mfg Co
Christie Electric Corp 3410 West 67 St Los Angeles
43 Calif
CHROMALOX—Wiegand (Edwin L) Co
CHROME-X—Pass & Seymour Inc
CHRONISTER—Bergen Laboratories
CHRONO-SPRAY—Paragon Electric Co
CHRONO-TEMP—Paragon Electric Co
Chronoflash Co Oakdale Pa
CHRYSLER AIRTEMP—Airtemp Div Chrysler Corp
CINCH—National Lead Co
Cincinnati Clock & Instrument Co 1117 Harrison Ave
Cincinnati 14 Ohio
Cincinnati Time Recorder Co 1733 Central Ave
Cincinnati 14 Ohio
Circ-Lite Inc—see Hasco Electric Corp
CIRCA-LITE—Kenworth Co
CIRCAR—Circle Wire & Cable Corp
CIRCLARC—Westinghouse Electric Corp Lamp Div
Circle Air Industries Inc 244 Herkimer St Brooklyn
16 NY
Circle Air Products Inc—see Circle Air Industries Inc
CIRCLE B—Bristol Motor Div Vocaline Co of America
Inc
CIRCLE D—Natale Machine & Tool Co
Circle F Mfg Co 720 Monmouth St Trenton 4 New
Jersey
CIRCLE L—Low Electric Fittings Co
Circle Wire and Cable Corp 5500 Maspeth Ave
Maspeth LI NY
Circlelite Corp—see House-O-Lite Corp
CIRCLELUX—Pfaff & Kendall
CIRCLEOLD—Circle Wire & Cable Corp
CIRCLESHEATH—Circle Wire & Cable Corp
CIRCELTROL—Electrical Mfg Co
CIRCLGRID—Wilson (JA) Lighting & Display Inc
CIRCLINE—Sun-Lite Mfg Co
CIRCLC—Circle Wire & Cable Corp
CIRCUITROL—Continental Electric Equipment Co
CIRCULAR—Kisco Co Inc
Circulators Devices Mfg Corp—see Frigid Inc
CIRCULETE—Lightolier Inc
CIRCULUX—Garcy Lighting Div Garden City Plating
& Mfg Co
CIRFLEX—Circle Wire & Cable Corp
CIRKLAR—Folsom Co Inc
CIRTEX—Circle Wire & Cable Corp
CIRTUBE—Circle Wire & Cable Corp
CIRTUF—Circle Wire & Cable Corp
CITATION—York Div
Clarage Fan Co Kalamazoo Mich
Clare (C P) & Co 3101 Pratt Blvd Chicago 45 Ill
CLAREMONT—Lightolier Inc
Clark (George P) Div Cragin & Wilkins Co Inc Fitch-
burg Mass
Clark Controller Co 1146 E 152 St Cleveland 10
Ohio
Clark-Cooper Co Inc 317 N Market St Palmyra NJ
Clauis Cutlery Co Fremont Ohio
CLEAN-FLD—Allis (Louis) Co
CLEAN-O-MATIC—Siebinger Mfg Co
Clean Sweep Co 6534 1/2 Whittier Blvd Los Angeles
22 Calif
CLEAR-SELE—Rust-Oleum Corp
CLEARLITE—Economy Fuse Div Federal Pacific Co

Clement Electric Co 223 Erie St N W Grand Rapids 2 Mich
 Clement Industrial Electric Co—see Clement Electric Co
 Clements Mfg Co 6650 S Narragansett Ave Chicago 38 Ill
 Cleveland Electric Motor Co 5213 Chester Ave Cleveland 3 Ohio
 Cleveland Switchboard Co 2925 E 79 St Cleveland 4 Ohio
 Cleveland Trencher Co 20100 St Clair Ave Cleveland 17 Ohio
 CLI-MO-TROL—Weltronic Co
 CLICK-ON—Electrical Fittings Corp
 CLIFALL—Clifton Conduit Corp
 Clifton Conduit Co Inc—see Clifton Conduit Corp
 Clifton Conduit Corp 3300 Eastbourne Ave Baltimore 24 Md
 Clifton Mfg Co Inc 34 Topalian St Mattapan Boston 26 Mass
 CLIFTEX—Clifton Conduit Corp
 CLIMATE CHANGER—Trane Co
 CLIMATROL—Mueller Climatrol
 CLIMAX—Glade Mfg Co
 CLINI-GRAPH—Weksler Instrument Corp
 CLIPPER—Cincinnati Time Recorder Co
 CLIPPER—Linemaster Switch Corp
 CLIPPER—Trade-Wind Motors Inc
 CLIPPER—Walker Brothers
 Clipper Mfg Co 2800 Warwick Kansas City 8 Mo
 CLIPITTE—Economy Fuse Div Federal Pacific Elec Co
 CLORINOL—Sprague Electric Co
 CLOSED-BACK—U S Expansion Bolt Co
 CLUSTER LITE—Revere Electric Mfg Co
 CLUSTERETTE—Benjamin Electric Mfg Co
 Coates Electric Mfg Co 3419 11th Ave S W Seattle 4 Wash
 COAXIAL—Marion Electrical Instrument Co
 COBANIC—Driver (Wilbur B) Co
 COBENIUM—Driver (Wilbur B) Co
 COCO—Coil Co of America Inc
 CODE-CALL—Wheeler Signals Inc
 Code Development Co—see Code Equipment Sales Co
 Code Equipment Sales Co P O Box 5847 Philadelphia 28 Pa
 Code Products Corp—see Code Equipment Sales Co
 COFFEE-HOT—Supreme Electric Products Co
 Coffing Hoist Co—see Coffing Hoist Div Duff-Norton Co
 Coffing Hoist Div Duff-Norton Co Danville Ill
 COHFRQAM—Connecticut Hard Rubber Co
 COHRLASTIC—Connecticut Hard Rubber Co
 Coil Co of America Inc 207-209 Washington St Northvale NJ
 COIL-FLEX—Ideal Industries Inc
 Cold Cathode Corp—see Cold Cathode Lighting Corp
 Cold Cathode Lighting Corp 42-40 27th St Long Island City NY
 COLDCOTE—Anacoda Wire & Cable Co
 Cole (C W) & Co Inc P O Box 3382 Los Angeles 54 Calif
 Cole Electric Products Co—see Federal Pacific Electric Co
 Collins Machinery Corp 5474 Alhambra Ave Los Angeles 32 Calif
 Collier Insulated Wire Co 249 Roosevelt Ave Pawtucket R I
 Colonial Electric Products Div Colonial Neon Co Inc 1-115 Market St East Paterson NJ
 COLOR TONE—Westinghouse Electric Corp Lamp Div
 COLORBEAM—Amplex Corp
 COLORSCOPE—Simpson Electric Co
 COLORVOLT—Pollak Luminescent Corp
 Columbia Cable & Electric Corp 255 Chestnut St Brooklyn 8 NY
 Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio
 Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash
 COLUMBIA-FLEX—Columbia Cable & Electric Corp
 Columbia Industries Inc—see Columbia Products Inc
 Columbia Metal Box Co 260 E 143 St NY 51 NY
 Columbia Products Inc Wrightsville Pa
 COLUMBIA—QUALITY—Columbia Metal Box Co
 COLUMBUS—Conduit Pipe Products Co
 Columbus Products Corp—Greilbach Instruments Corp
 Comar Electric Co 3349 W Addison Chicago 18 Ill
 COMBI—Wodack Electric Tool Corp
 COMET—Standard Electric Co Inc
 Comet Lamp Co 7 E 35 St New York 16 NY
 COMFO—Minn Safety Appliances Co
 COMFORT CONTROL—Controls Co of America
 COMFORT-SHIELD—Lincoln Electric Co
 Commercial Enclosed Fuse Co of NJ 6812 Polk St Guttenberg NJ
 Commercial Reflector & Mfg Co 3109 Maple Ave Los Angeles 11 Calif
 COMMERCIALAIRE—Frigid Inc
 Commercialaire Corp of America 840 E 98 St Brooklyn 36 NY
 COMMERCIALITE—Commercial Reflector & Mfg Co
 COMMODORE—Wakefield Co
 COMMUNICALL—Sperli Faraday Inc
 COMMUNICATOR—Godfrey Mfg Co
 COMPACK—General Cable Corp
 COMPACT—Linemaster Switch Corp
 Compco Corp 1800 N Spaulding Ave Chicago 47 Ill
 COMPO—Bound Brook Oil-Lease Bearing Co
 COMPOUND LEVER—Bartlett Mfg Co
 CON-FER-PHONE—Simpson (Mark) Mfg Co Inc
 CON-LET—Goldak Co Inc
 Conant Laboratories Box 3997 Bethany Station Lincoln 5 Neb

CONCENTROL—Continental Electric Equipment Co
 Concrete Engineering Co—see Ecco Steel Products Corp
 CONDEX—Simplex Wire & Cable Co
 Condi-Lite Corp 889 Broadway New York 3 NY
 CONDIT—Allis-Chalmers Mfg Co
 CONDOR—Raybestos-Manhattan Inc
 CONDU-MATIC—Chamom Mfg Corp
 CONDUCTO-LUBE—Cool-Amp Co
 Conduflex Corp 13560 Lorain Ave (P O Box 2748) Cleveland 11 Ohio
 CONDUIT OF COLUMBUS—Conduit Pipe Products Co
 Conduit Fittings Corp 6400 W 66th St Chicago 38 Ill
 Conduit Nipple Mfg Co 1455 Spring Garden Ave Pittsburgh 12 Pa
 Conduit Pipe Products Co 157 W Fulton St Columbus 16 Ohio
 CONDULETS—Crouse-Hinds Co
 CONDULETT—Crouse-Hinds Co
 CONEX—Weiss & Biheller Merchandise Corp
 CONIG—Hilti Rapid Fastening Systems Inc
 Connecticut Electric Mfg Co Main St Bantam Conn
 Connecticut Hard Rubber Co 407 East St New Haven 9 Conn
 CONROD THE CONTROL—Dixie Controller Inc
 CONSOLAIRE—Remington Corp
 CONSTELLATION—Trindl Products Ltd
 CONTINENTAL—Globe Lighting Products Inc
 Continental Carbon Div of Wirt Co 5221 Greene St Philadelphia 44 Pa
 Continental-Diamond Fibre Newark Del
 Continental Electric Co 1234 S Prairie Ave (P O Box 895) Hawthorne Calif
 Continental Electric Co Inc 325 Ferry St Newark 5 NJ
 Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio
 Continental Radiant Glass Heating Corp 1 E 35th St NY 16 NY
 Continental Wire Corp P O Box 366 Wallingford Conn
 CONTRA-DYNE—Electric Controller & Mfg Co
 CONTRA-TORQUE—Electric Controller & Mfg Co
 Control Panel Corp 517 W Monroe St Chicago 6 Ill
 CONTROLARC—Vickers Inc
 CONTROLLEAD—Marathon Special Products Corp
 CONTROLENS—Holophane Co Inc
 CONTROLITE—Line Material Industries
 CONTROLITE—Ward Leonard Electric Co
 CONTROLMAX—Sangamo Electric Co
 Controls Co of America 2450 N 32 St Milwaukee 45 Wisc
 Convaire Inc P O Box 9671 Pittsburgh 16 Pa
 CONVERT-O-CALL—Adcrafters Co
 CONVERTI-FUSE—General Electric Co
 Cook's Sems (Adam) Inc 5 N Stiles St Linden NJ
 Cool-Amp Co 8603 W 17 Ave Portland 19 Ore
 COOL-CIRCLE-ATOR—Kisco Co Inc
 Cool-ette Inc 7535 W 8 Mile Rd Detroit 21 Mich
 COOL-SPOT—Signal Electric Div King-Seely Corp
 COOLAIR—American Cooler Corp
 Coolerator Div McGraw-Edison Co 704 Clark St N Albany Mich
 COOLERS—Hirschman-Pohle Co Inc
 COOLINE—Ohio Brass Co
 Cooper (D C) Co 1467 S Michigan Ave Chicago 5 Ill
 Cooper Hewitt Electric Co 720-732 Grand St Hoboken NJ
 Co-operative Utilities Co Inc 4637-39 Mulberry St Phila 24 Pa
 COPACO—Cottrell Paper Co Inc
 COPALEM—Cottrell Paper Co Inc
 Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa
 CJPING-LITE—Magni Flood Inc
 COPPERSPUN—Fairbanks Morse & Co
 COPPERTONE—Globe Lighting Products Inc
 Copperweld Steel Co Wire and Cable Div Glassport Pa
 Coppus Blue Ribbon Products—see Coppus Engineering Corp
 Coppus Engineering Corp 344 Park Ave Worcester 10 Mass
 CORAL DESIGNS—Diezel (Henry G) Co Inc
 CORDETTE CASUALS—Moe Light Div Thomas Industries Inc
 Cordomatic Div Vacuum Cleaner Corp of America 1724 W Indiana Ave Phila 32 Pa
 CORDON—L-T-E Circuit Breaker Co
 CORE BORE—Equipment Corp of America
 CORE-O-MATIC—Induction Heating Corp
 CORE VENT—Super Tool Co
 CORMAG—Weston Instruments
 Cornell-Dubilier Electric Corp 333 Hamilton Blvd South Plainfield NJ
 Corning Glass Works Corning NY
 Corning Wire Co Inc 50 Church St NY 7 NY
 CORTONA—Versen (Kurt) Co
 Corona Equipment Co Inc—see Corona Mfg Corp
 Corona Mfg Corp 11300 Tuxford St Sun Valley Calif
 CORONET—Jay Lighting Mfg Co Inc
 COROPRENE—Corning Wire Co Inc
 COROPREX—Corning Wire Co Inc
 COROX—Westinghouse Electric Corp
 CORRALIVE—Day-Brite Lighting Inc
 CORRALUME—Day-Brite Lighting Inc
 CORRECTOLITE—Holophane Co Inc
 CORRIB—Ohmite Mfg Co
 CORRIDOR-LITE—House-O-Lite Corp
 CORRU-LUMINUS—Luminus Ceilings Inc
 CORSAIR—Scranton Storage Battery Corp
 COTENAMEL—Belden Mfg Co

Cottrell Paper Co Inc 88 Purchase St Fall River Mass
 COUCH-CALL—Couch (S H) Co Inc
 Couch (S H) Co Inc 3 Arlington St North Quincy 71 Mass
 Couch Ordnance Div—see Couch (S H) Co Inc
 Counter & Control Corp 5225 W Electric Ave Milwaukee 19 Wisc
 COUNTER-FLOW—Blue M Electric Co
 COVERLITE—Stieber Mfg Co
 COZY-GLOW—Westinghouse Electric Corp
 CRAFT LITE—Paramount Industries Inc
 CRAFTSMAN—Stahl Metal Products Inc
 Cramer (R W) Co—see Cramer Controls Corp
 Cramer Controls Corp Main St Centerbrook Conn
 Crane (H W) Co 15 N 9th Ave Maywood Ill
 Crane-Puller Co Waltham 54 Mass
 CRANELITE—Holophane Co Inc
 CraneVeyor Corp 1240 S Boyle Ave Los Angeles 23 Calif
 CRESCENT—Abrams Lighting
 CRESCENT—Wheeler Reflector Co
 Crescent Co Inc 20 Central Ave Pawtucket R I
 Crescent Insulated Wire & Cable Co 319 N Olden Ave Trenton 5 N J
 Crescent Plastics Inc 955 Diamond Ave Evansville 7 Ind
 Crescent Tool Co 200 Harrison St Jamestown NY
 CRESCORD—Crescent Insulated Wire & Cable Co
 CRESFLEX—Crescent Insulated Wire & Cable Co
 Crest Transformer Corp 1834-36 W North Ave Chicago 22 Ill
 CRESTBRITE—Crest Transformer Corp
 CRESTOLV—Crest Transformer Corp
 CRESTRAN—Crest Transformer Corp
 CRESTOL—Crest Transformer Corp
 CRESYNTHOL—Crescent Insulated Wire & Cable Co
 CRIMCUT—Vaco Products Co
 CRIMPIT—Burnby Corp
 Crise Controls Div—see Acro Div Robertshaw-Fulton Controls Co
 Crittenden Transformer Works Inc 13011 S Spring St Los Angeles 61 Calif
 Crocker-Wheeler Div Elliott Co Ampere NJ
 Crocker-Wheeler Electric Mfg Co—see Crocker-Wheeler Div Elliott Co
 Crouse-Hinds Co Syracuse 1 NY
 CROWN—Miller Co
 Crown Industrial Products Co 713 Amsterdam St Woodstock Ill
 Crownlite Fluorescent Co 7 Roselle St Mineola NY
 Crozier Machine Tool Co 684 N Prairie Ave Hawthorne Calif
 Crucible Steel Co of America Oliver Bldg Mellon Sq Pittsburgh 22 Pa
 CRYSTAL—Royal Electric Corp
 Crystalheat Co—see General Alliance Corp
 CRYSTALLER—Duro-Test Corp
 CRYSTOPAL—Corning Glass Works
 CUAL-AID—Penn-Union Electric Corp
 Cummins—Chicago Corp—see Cummins Portable Tools Div John Oster Mfg Co
 Cummins Portable Tool Div John Oster Mfg Co 5055 N Lydell Ave Milwaukee 17 Wisc
 CUPSON—Driver (Wilbur B) Co
 Curran Engineering Co—see So-Cal Electro Products Inc
 CURRENTROL—Lincoln Electric Co
 CURTAIN OF LIGHT—Electronic Control Corp
 CURTICELL—Curtis Lighting Div
 Curtis Development & Mfg Co 3244 N 33 St Milwaukee 16 Wisc
 Curtis Lighting Div Curtis-Ail Brite Lighting Inc 6135 W 65 St Chicago 38 Ill
 Curtis Lighting Inc—see Curtis Lighting Div
 Curtis Mfg Co Refrigeration Div 1905 Kienlen Ave St Louis 20 Mo
 CURTISTRIP—Curtis Lighting Div Curtis-Ail Brite Lighting Inc
 CURVACORE—Allis-Chalmers Mfg Co
 CURVETTE—Stieber Mfg Co
 Curville Surgical Products Co—see Mastercraft Plastics Co Inc
 CUTAWL—International Register Co
 Cutler Electrical Products Inc 5524 Haverford Ave Philadelphia Pa
 Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wisc
 Cutler Industries—see Cutler Light Mfg Co
 Cutler Light Mfg Co 2026 N 22 St Phila 21 Pa
 Cutler Sign Advertising Co—see Cutler Light Mfg Co
 Cybermotive—Dalmotor Co
 Cyclo-Core—New England Carbide Tool Co Inc
 CYCLO-MONITOR—Counter & Control Corp
 CYCLO-TWIST—New England Carbide Tool Co Inc
 CYCLOHM—Howard Industries Inc
 CYCLONE—Chisholm-Moore Hoist Div Div Columbus McKinnon Chain Corp
 CYCLONE—New England Carbide Tool Co Inc
 CYCLONE—Scranton Storage Battery Corp

D

D H D—Diamond Expansion Bolt Co Inc
 DPR Inc—see Hardman (H V) Co Inc
 D & R Ltd 402 E Gutierrez St PO Box 1500 Santa Barbara Calif
 DTX—Diamond Wire & Cable Co
 DA-N-HITE—Premax Products Div Chisholm-Ryder Co Inc
 Dage Television Div Thompson Products Inc Michigan City Ind

DAGLAS—Phelps Dodge Copper Products Corp
DAISY—American Pulley Co
Dale Corp 724 Robbins Rd Grand Haven Mich
Dale Engine Co—see Dale Corp
Dalmator Co 1375 Clay St Santa Clara Calif
Dalmon Co 534 Laurel St San Carlos Calif
Dalton Electric Heating Co 11 Goodhue St Salem Mass
DAMCO—Murray (D A) Co Inc
DAMP-COAT—Wilbur & Williams Co
Damp-Chaser Inc 1440 Ridgewood Blvd Hendersonville N C
Dana Fan & Blower Corp 2644 Colerain Ave Cincinnati 14 Ohio
Dante Electric Mfg Co Bantam Conn
DARAY—Lightoller Inc
DATALITE—Dialight Corp
Davenport Mfg Co 2532 N Elston Ave Chicago 47 Ill
DAVEY—Vibrascope Co
Davids Gloves Inc 21 W Pleasant St Springfield Ohio
Davidson Fan Co 213 California St Newton 58 Mass
Davis (Dean W) Co—see Dormeyer Industries
Davis Electric Co 28 Parker St Wallingford Conn
Day-Brite Lighting Inc 6260 N Broadway St Louis 15 Mo
DAY-LINE—Day-Brite Lighting Inc
Day-Ray Products Inc 1133 Mission St South Pasadena Calif
DAYWHITE—Price Bros Inc
DAYLIME—Day-Brite Lighting Inc
DAYNA—Progress Mfg Co Inc
DAYSTAR—Lighting Products Inc
Dayton Electric Laboratory—see Delco Products Div
Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill
Dayton Precision Mfg Co 213 N Beckel St Dayton 3 Ohio
Dayton Pump & Mfg Co—Taitco Div Tait Mfg Co
Dayton Rubber Co Dayton 1 Ohio
Dayton Safety Ladder Co 2337 Gilbert Ave Cincinnati 6 Ohio
DAZIC—Winterburn Mfg Co
DE-FROST-IT—Paragon Electric Co
DE-ION—Westinghouse Electric Corp
DE-LUXE—Premax Products Div Chishold-Ryder Co Inc
DEAN—Solar Light Mfg Co
DeBothezat Fans Div American Machine & Metals Inc East Moline Ill
DECALS—Chicago Decalcomania Co
DECITRON—Post Machinery Co
DECORALITE—Miller Co
DECRLOL—Westinghouse Electric Corp Lamp Div
DEFENSE LIGHT—Electric Cord Co
DeJury-Amsco Corp 4501 Northern Blvd Long Island City 1 NY
DEKORON—Republic Steel Corp
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio
Delta Chemical Works Inc 23 W 60 St New York 23 NY
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill
DELTA-BESTON—General Electric Co
DELUXE SECRETARIAL—Linemaster Switch Corp
DEMNOTE—Dayton Electric Mfg Co
DENEL—Electric Cord Co
DENISEHEAT—Anacoda Wire & Cable Co
DENSITROL—Precision Thermometer & Instrument Co
DENTROL—Anacoda Wire & Cable Co
DEPEND A TROL—Hankschaft Co
Dependable-Electric Mfg Co Inc 537 Johnson Ave Brooklyn 37 NY
DERBY—Day-Brite Lighting Inc
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex
DESIGNER GROUP—Curtis Lighting Div
DESPARD—Pass & Seymour Inc
Despatch Oven Co 619 S E 8th St Minneapolis 14 Minn
DETECT-A-FIRE—Fenwal Inc
DETECT-A-FLO—Fenwal Inc
DETECTO-LITE—Eagle Electric Mfg Co Inc
DETERMORN—Ohmrite Mfg Co
Detroit Controls Div American-Standard 5900 Trumbull Ave Detroit 8 Mich
Detroit Electric Furnace Div Kuhlman Electric Co Bay City Mich
Detroit Holst & Machine Co 8292 Morrow St Detroit 11 Mich
Detroit Industrial Products Co—see Gardner Products Co
Detroit Lubricator Co—see Detroit Controls Div American-Standard
Detroit Sheet Metal Co—see Young Bros Co
Detroit Sintered Metal Corp—see Bunting Brass & Bronze Co
DETROITER—Detroit Holst & Machine Co
DeVilbiss Co 300 Phillips Ave Toledo 1 Ohio
DeWalt Div American Machine & Foundry Co Fountain Ave Lancaster Pa
DeWalt Inc—see DeWalt Div American Machine & Foundry Co
De Walt Products Corp—see De Walt Div American Machine & Foundry Co
DEXION—Acme Steel Co
DEXTRA LITE—Swiveller Co Inc
DI-ACRO—O'Neil-Irwin Mfg Co
DI-EL-ITE—Everett (E A) Inc
DI-EN-KEY—Diamond Expansion Bolt Co Inc
DI-FORGE—Diamond Expansion Bolt Co Inc
DI-STAMP—Diamond Expansion Bolt Co Inc
DIATOR—General Electric Co
DIAL-A-FLO—General Control Co
DIAL SAW—Erwood Inc
DIALCLOR—Sangamo Electric Co
DIALCO—Dialight Corp
Dialight Corp 60 Stewart Ave Brooklyn 37 NY
DIAMALLOY—Diamond Tool and Horseshoe Co
DIAMIDE—Diamond Expansion Bolt Co Inc
DIAMOND—Cannon Electric Co
DIAMOND—Eagle Electric Mfg Co Inc
Diamond Calk Horseshoe Co—see Diamond Tool
DIAMOND-D—Co-operative Utilities Co Inc
DIAMOND F—Federal Lighting Corp
DIAMOND-H—Hart Mfg Co
Diamond Expansion Bolt Co Inc Garwood NJ
Diamond Power Specialty Corp P O Box 415 Lancaster Ohio
DIAMOND SEAL—Snyder (M L) & Son Inc
Diamond Tool and Horseshoe Co 4702 Grand Ave Duluth 7 Minn
Diamond Wire & Cable Co 445 Park Ave Sycamore Ill
Dice (J W) Co Englewood NJ
Dicke Tool Co 1201 Warren Ave Downers Grove Ill
Dickey-Grabler Co 10302 Madison Ave Cleveland 2 Ohio
Diehl Mfg Co 1187 Finden Ave Somerville NJ
Dietz (Henry G) Co Inc 12-16 Astoria Blvd Long Island City 2 NY
DIFFUSO—Appleton Electric Co
DIGITRONIC—Weltronic Co
DIL—Derrick Light & Equipment Co
DIM-A-LITE—Minneapolis-Honeywell Regulator Co
Dings Brakes Inc 4740 W Electric Ave Milwaukee 46 Wis
DIP-PAK—Fidelity Chemical Products Corp
DIRECTOLITE—Line Material Industries
DIRECTOR—Industrial Lamp Corp
DIRECTORAY—Salton Mfg Co Inc
DIRECTORLITE—Duro-Test Corp
DIRECTROL—Automatic Control Co
DIRECTRON—Miller (Sanford) Co
DISINFECTAIRE—Art Metal Co
DISKONECT—Appleton Electric Co
DISPLAYOLITE—Ruby-Phillite Corp
Distribution & High Line Specialties 2100 Del Norte St Louis 17 Mo
DITCH WITCH—Mercury Hydraulics
DITCH WITCH—Charles Machine Works Inc
DIVCO—Division Lead Co
DIVIDOHM—Ohmrite Mfg Co
Division Lead Co 7742 W 61st Place Summit Ill
Dixie Controller Inc Post Office Box 5844 Birmingham 9 Ala
Dixie Electrical Mfg Co P O Box 745 Birmingham Ala
Dixie Radiant Glassheat Co—see Dixie Raydiant
DIXIE RAY—Dixie Raydiant Electric Heat Corp
Dixie Raydiant Electric Heat Corp 66 Eleventh St N E Atlanta 9 Ga
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill
DO-ALL—Cable Electric Products Inc
DO-ALL—Wodack Electric Tool Corp
DOC—All-State Welding Alloys Co Inc
Dockson Corp 3839 Wabash Ave Detroit 8 Mich
Doelcam Corp—see Minneapolis-Honeywell Co Boston Div
Dolph (John C) Co Monmouth Junction NJ
DOME ALZAK—Guth (Edwin F) Co
DOMELITE—MiroFlector Co Inc
DOMEX—Lightoller Inc
Dominion Electric Corp 150 Elm St Mansfield Ohio
Dongan Electric Mfg Co 2987-3001 Franklin St Detroit 7 Mich
DONUT—Associated Research Inc
DONWOOD—Sierra Electric Corp
Doors & Operators Inc—see Quincy Mfg Co
Dormeyer Industries 3418 Milwaukee Ave Chicago 41 Ill
Dorsey (John E) Co 570 E First St Boston 27 Mass
DOS-LUG—Dossert Mfg Corp
DOSLOY—Dossert Mfg Corp
Dossert Mfg Corp 249-255 Huron St Brooklyn 22 NY
DOSSON—Dossert Mfg Corp
DOSTEX—Dossert Mfg Corp
DOSULON—Dossert Mfg Corp
DOUBLE-DIAMOND—H-B Instrument Co
DOUBLE ENGINEERED—Metaelectric Inc
DOUBLE-KOOL—Hastings Air Conditioning Co Inc
DOUBLENCLOSED—U S Electrical Motors Inc
DOUBLEX—Johns-Manville
Dow Corning Corp Midland Mich
DOWNLITE—Rambusch Decorating Co
Doyle (J E) Co 1220 W 6th St Cleveland 13 Ohio
Doyle Electric Dryer Co—see Doyle (J E) Co
Doyle Vacuum Cleaner Co 234 Stevens St S W Grand Rapids Mich
DRACO—Verson (Kurt) Co
DRACO-CU—Verson (Kurt) Co
Drake Mfg Co 4626 N Olcott Harwood Heights Chicago 31 Ill
DRAMALITE—Century Lighting Inc
DREADNAUGHT—Metalcraft Products Co Inc
DREADNAUGHT—Paranite Wire & Cable Div
Dreier Brothers Inc 7301 Woodlawn Ave Chicago 19 Ill
DREXEL—Keystone Electric Mfg Co
DRI-FILM—General Electric Co
DRI QUIK—Dry Climate Lamp Corp
DRI-TRAN—Land-Air Inc
DRILFAST—U S Expansion Bolt Co
DRILL-HAMMER—Rawplug Co Inc
DRITHERM—North American Electric Lamp Co
DRIVE-IT—Omark Industries Inc
DRIVE POINT—Hubbard & Co
Driver (Wilbur B) Co 1875 McCarter Highway Newark 4 NJ
DRUM KING—American Pulley Co
Dry Climate Lamp Corp Greensburg Ind
DRY-EX—Acme Industries Inc
DRYGALV—American Solder & Flux Co
DRYMASTER—Dryomatic Corp
Dryomatic Corp 806 N Fairfax St Alexandria Va
DRYVIN—Star Expansion
DU-OP—General Control Co
DUA-LITE—Curtis Lighting Div
DUAFUEL—Nordberg Mfg Co
DUAL ARC—Electric Arc Inc
DUAL-BEAM—Cable Electric Products Inc
DUAL-FIN—Electrovector Inc
DUAL GRIP—Weaver (J A) Co
DUAL-HEAT—Jensen Inc
DUAL LITE—Mechanical Industries Production Co
Dual-Lite Co Inc Newtown Conn
DUALCOTE—Walker Brothers
DUALTRONIC—Goldak Co Inc
DUB-L-PLUG—Superior Electric Co
DuBois Electric Storage Battery Co 500 W DuBois Ave DuBois Pa
DUCK-VAR—Electro-Technical Products Div
DUCTAHERM—Mercoind Corp
DuKane Corp St Charles Ill
Dumore Co 1300 17th St Racine Wis
DUMPER—Allied Mfg & Sales Co
DUNCNO—Struthers-Dunn Inc
Dunton (M W) Co 7 Goff St Providence RI
DUO-FRAME—Day-Brite Lighting Inc
DUO-JOBMASTER—Ramset Fastening System
DUO-SERVICE—Benjamin Electric Mfg Co
DUOCARB—Driver (Wilbur B) Co
DUOCONE—Lightoller Inc
DUOLET—Millerbernd Mfg Co
DUPLEX—Newark District Telegraph Co
DURA CRIMP—Anderson Electric Corp
Dura Electric Lamp Co Inc 62 E Bigelow St Newark 8 NJ
DURA GRIP—Anderson Electric Corp
DURA LUG—Anderson Electric Corp
DURA-TEMP—General Blower Co
DURA WELD—Anderson Electric Corp
DURABAKE—S & C Electric Co
DURABLE—Seager Standard Carbon Co
DURAC—H-B Instrument Co
DURACODE—Anacoda Wire & Cable Co
DURACORD—Anacoda Wire & Cable Co
DURALEER—Dura Fluorescent Mfg Co
DURALINE—Anacoda Wire & Cable Co
Duralite Lanterns Inc 163 Long Beach Rd Island Park NY
DURALOX—Anacoda Wire & Cable Co
DURAMATIC—Dura Electric Lamp Co Inc
Dura Mfg Co 1987 No Buffum St Milwaukee 1 Wis
DURAPRENE—Anacoda Wire & Cable Co
DURASEAL—Anacoda Wire & Cable Co
DURASHEATH—Anacoda Wire & Cable Co
DURATACH—Wheeler Reflector Co
Dura Fluorescent Mfg Co 3318 W Montrose Ave Chicago 18 Ill
DUREX—Duro-Test Corp
DUREX—Wheeler Reflector Co
DURIUM—Burndy Corp
Duro Fittings Co 2210 S Dawie Ave Los Angeles 22 Calif
DURO-LITE—Duro-Test Corp
Duro Metal Products Co Kildare & Schubert Sts Chicago Ill
Duro-Test Corp 2321 Hudson Blvd North Bergen NJ
DUROC—Scranton Storage Battery Corp
Durolet Mfg Co—see Red Seal Electric Co
DUSTFOE—Mine Safety Appliances Co
DUSTITE—Adam (Frank) Electric Co
DUTCH BOY—National Lead Co
Dutch Brand Div Johns-Manville 7800 S Woodlawn Ave Chicago 19 Ill
DUTRAX—Anacoda Wire & Cable Co
DUWEL—Electro Engineering Products Co Inc
DUZ-ALL—Siebring Mfg Co
Dwyer (F W) Mfg Co Woodland at Greenwood (P O Box 373) Michigan City Ind
DYN-AUT-RONIC—Gisholt Machine Co
DYNACHROME—Whitney Blake Co
DYNAMIC—Jackson Electrical Instrument Co
DYNAMOTIVE—Automatic Transportation Co
DYNAPOWER—Carol Cable Co
DYNAPOWER—Crescent Co Inc
DYNAPRENE—Whitney Blake Co
DYNASEAL—Whitney Blake Co
Dynalect Lighting Corp 5 Hadley St Cambridge 40 Mass
DYNATACH—Electric Tachometer Corp
DYNATROL—Automation Products Inc
DYNETRIC—Gisholt Machine Co
DYNETRIC—Westinghouse Electric Corp
DYNOMITE—Millers Falls Co
DYNOGRAPH—Annis (R B) Co
E
E-LITE—Guth (Edwin F) Co
EC&M—Electric Controller & Mfg Co

EE—Elliott Electric Products Co
E J S Lighting Corp 321 E Pico Blvd Los Angeles 21
Calif
E-M—Electric Machinery Mfg Co
EMC—Howard Industries Inc
ETC—Electric Terminals & Connectors Inc
EZ—Henderson Electric Co
E-Z—Penn-Union Electric Corp
E-Z CODE—Westline Products Div Western Lithograph
Co
E-Z CUTTER—Collins Machinery Corp
E-Z MARK—Crown Industrial Products Co
E-Z RED—Wadsworth Electric Mfg Co Inc
EZ SERVICER—Wiley (R & W) Inc
EZ STRIPPER—Ideal Industries Inc
EZ SWINGING—Acme Lite Products Co
E-Z TALK—Simpson (Mark) Mfg Co Inc
EAGALINE—Eagle Electric Mfg Co Inc
EAGALOK—Eagle Electric Mfg Co Inc
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South
Long Island City 1 NY
Eagle Mfg Co 3508 Avalon Blvd Los Angeles 11
Calif
Eagle-Picher Co American Building Cincinnati 1
Ohio
Eagle Plastics Co—See Eagle Electric Mfg Co Inc
Earl (H W) & Co 6225 S W 8th St Miami 44 Fla
Earl Electric Mfg Corp 35-20 Borden Ave Long Island
City NY
Early (Edward E) Co 1129 5th St N W Canton 3
Ohio
EASCO—Electric Arc Sales Co
EASIMOUNT—Edwards Co Inc
EASTERN—Circle F Mfg Co
Eastern Specialty Co 3617 N 8th St Phila 40 Pa
Eastern Tube & Tool Co Inc—see Etico Wire & Cable
Corp
EASTEX—Circle F Mfg Co
EASY TACH—Quadrangle Mfg Co
EASY WIRE—Gem Electric Mfg Co Inc
Ebo Mfg Co 265 N Hamilton Rd Columbus 13 Ohio
EBERHARDT-DENVER—Morse Chain Co
Ebert Electronics Corp 212-26 Jamaica Ave Queens
Village 28 LI NY
ECLIPSE—Frick Co
ECLIPSE—Sperli Faraday Inc
ECO—Economy Fuse Div
EOA—Equipment Corp of America
ECON—Economy Fuse Div
ECON-O-MATIC—American Pulley Co
ECONICOM—Simpson (Mark) Mfg Co Inc
ECONO-MIZER—Acme Industries Inc
ECONO-MIZER—Nemco Electric Co
ECONO-WATT—Redmond Co Inc
ECONOFONE—Simpson (Mark) Mfg Co Inc
ECONOLINE—Duro Fittings Co
ECONOMY—Costes Electric Mfg Co
ECONOMY—Keystone Electric Mfg Co
Economy Engineering Co 4511 West Lake St Chicago
24 Ill
Economy Fuse & Mfg Co—see Economy Fuse Div
Economy Fuse Div Federal Pacific Electric Co 2717
N Greenview Ave Chicago 14 Ill
EDCO—Eymon-Dakin Co
Edco International Corp 20722 W Seven Mile Road
Detroit 19 Mich
EDDYMAG—Electric Controller & Mfg Co
Eder Engineering Co 2943 1st Ave S Seattle 4
Wash
EDGE-GLO—Curtis Lighting Div
Edison Heatable Div—see Heatable Dept
Edison Storage Battery Div McGraw-Edison Co West
Orange NJ
Edmor Lamp Co Inc 1867 Flatbush Ave Brooklyn 10
NY
EDUCATOR—Lighting Products Inc
Edwards Co Inc Norwalk Conn
EEO—Marvin Electric Mfg Co
Efficiency Electric & Mfg Co Park Ave Ext P O Box 30
East Palestine Ohio
EFCOR—Electrical Fittings Corp
EFCORLET—Electrical Fittings Corp
EFFICO—Hirschman-Pohle Co Inc
Eicor Div F L Jacobs Co 4235 W North Ave Chi-
cago 39 Ill
Eicor Inc—see Eicor Div
Eisenstat (David)—see Metallectrics Inc
Eisler Engineering Co Inc 750 S 13 St Newark 3 NJ
EITHEREND—Anderson (Albert & JM) Mfg Co
EKTACOM—Fisher Berkeley Corp
ELBENDERS—Henderson Electric Co
ELBOLIFT—Automatic Transportation Co
Electra Mfg Co 4051 Broadway Kansas City Mo
ELECTRO-O-LINE—Minneapolis-Honeywell Regulator Co
Industrial Div
ELECTRO-O-PULSE—Minneapolis-Honeywell Regulator Co
Industrial Div
ELECTRO-O-VANE—Minneapolis-Honeywell Regulator Co
Industrial Div
Electra Motors Inc 1110 N Lemon St Anaheim Calif
Electran Mfg Co 1901 Claybourn Ave Chicago 14 Ill
Electrand Products Corp State & Water Sts (Box
110) St Joseph Mich
ELECTRESTEEM—Electric Steam Radiator Corp
ELECTRI-CENTER—Building Electric Products Div
I-T-E Circuit Breaker Co
Electri-Cord Mfg Co Inc 2554-2568 E 18 St Brooklyn
35 NY
Electri-Flex Co Roselle Ill
Electric Arc Inc 152 Jelliff Ave Newark 8 NJ
Electric Arc Sales Co P O Box 587 Ypsilanti Mich
Electric Boat Co—see Electro Dynamic Div General
Dynamics Corp

Electric Controller & Mfg Co 4493 Lee Rd Cleve-
land 28 Ohio
Electric Cord Co 21 Spruce St New York 38 NY
Electric Deodorizer Corp—see Edco International Corp
Electric Distribution Products Inc 2200 31st St SW
Allentown Pa
ELECTRIC DOORMAN—Electric Power Door Co
ELECTRIC FLOWER—Aerolux Lights Corp
Electric Heating Products Inc—see Everwarm Inc
Electric Hose & Rubber Co 12th & Dure Sts Wilming-
ton Dela
Electric Hotpack Co Inc Cottman Ave at Melrose St
Phila 35 Pa
Electric Indicator Co Inc Camp Ave Springdale Conn
Electric Jobbers Suppliers Corp—see EJS Lighting Corp
Electric Lighting Inc P O Box 1907 Stockton Calif
ELECTRIC-LUMINUS—Luminous Ceilings Inc
Electric Machinery Mfg Co 800 Central Ave Min-
neapolis 13 Minn
Electric Materials Co Box 390 North East Pa
Electric Motor Corp—see Howard Industries Inc
Electric Motors & Specialties Inc King & Hamsher Sts
Garrett Ind
Electric Power Door Co 2127 E Lake St Minneapolis 7
Minn
Electric Power Plants Corp Buffalo St Cadiz Ohio
Electric Products Co 1725 Clarkstone Rd Cleveland
12 Ohio
Electric Railway Equipment Co—see Elreco Corp
Electric Railway Improvement Co—see Elreco Products
Inc
Electric Regulator Corp Norwalk Conn
Electric Re-Light Co 625 So Goodman St Rochester 20
NY
Electric Service Systems Inc 1330 Quincy St NE Min-
neapolis 13 Minn
Electric Soldering Iron Co Inc West Elm St Deep
River Conn
Electric Specialty Co 211 South St Stamford Conn
Electric Steam Radiator Corp 1 Electric Ave Paris
Ky
Electric Switch Corp 2320 S Tibbs Ave P O Box
41037 Indianapolis 41 Ind
Electric Tachometer Corp 68th & Upland Sts Phila 42
Pa
Electric Terminals Corp—see Electrix Terminals &
Connectors Inc
Electric Tube Products 74-16 Grand Ave Maspeth
NY
Electrical Engineers Equipment Co 25th Ave &
Division St Melrose Park Ill
Electrical Facilities Inc—see Knopp Inc
Electrical Fittings Corp 37-50 57th St Woodside 77
NY
Electrical Mfg Co 425 Lake Ave Racine Wis
Electrical Windings Inc 2015 N Kolmar Ave Chi-
cago 39 Ill
Electrical Service Co—see Esco Mfg Co
ELECTRICTUBE—Mark (Clayton) & Co
ELECTRIK—Minneapolis-Honeywell Regulator Co In-
dustrial Div
Electrix Terminals & Connectors Inc 990 E 67 St
Cleveland 3 Ohio
ELECTRO—Dunton (MW) Co
Electro Compound Co 4145 W 150 St (P O Box 2772)
Cleveland 11 Ill
ELECTRO-COOLER—Allis-Chalmers Mfg Co
Electro Devices Inc 888 E Northwest Hiway Mount
Prospect Ill
Electro Devices Co Inc 580 Main St Wilmington
Mass
Electro Dynamic Div General Dynamics Corp 163
Ave A Bayonne NJ
Electro Engineering Products Co Inc 609 W Lake
St Chicago 6 Ill
Electro Engineering Works 401 Preda St San Leandro
Calif
Electro Lift Inc 204 Sargeant Ave Clifton NJ
6-BUDGE Mach 131 Aug 10
ELECTRO-LARM—Electro Devices Inc
ELECTRO-PANE—Electro Devices Inc
Electro Lighting Corp 1535 Paulina St Chicago 8
Ill
Electro Luminaire Corp—see Electro Lighting Corp
ELECTRO MAT—Interstate Rubber Products Corp
Electro Mechanical Devices Co—see Nankervis (Geo L)
Co
Electro-Mechanical Instrument Co 8th & Chestnut
Sts Perkasie Pa
Electro-Mechano Co 261 E Erie St EM Milwaukee
2 Wis
ELECTRO-PANE—Electro Devices Inc
ELECTRO-PROBE—Erwood Inc
Electro-Products Mfg Co 8310 N E Highway 99
Vancouver Wash
ELECTRO-RAY—Electro-Products Mfg Co
ELECTRO-SHEAVE—Warner Electric Brake & Clutch
Co
Electro Silv-A-King Corp—see Electro Lighting Corp
Electro-Snap Switch & Mfg Co—see Electrosnap Corp
Electro-Technical Products Div Sun Chemical Corp
113 E Centre St Nutley 10 NJ
Electroflow Inc—see American Electronics Inc
ELECTROLETS—Killark Electric Mfg Co
Electroline Mfg Co 2622 E 51st St Cleveland 4
Ohio
Electromaid Corp—see Can Arm Corp
ELECTROMATIC—National Time & Signal Corp
ELECTROMATIC—Siebling Mfg Co
Electromode Div Commercial Controls Corp P O Box
1052 Rochester 3 NY
ELECTRONIC BUTLER—Simpson (Mark) Mfg Co Inc
Electronic Center—see Dalmatiron Co

Electronic Control Corp 1573 E Forest Ave Detroit
7 Mich
Electronic Measurements Co Inc Lewis St & Maple
Ave Eatontown NJ
ELECTRONIC WITCH—Fisher Research Laboratory Inc
Electronic Corp of America One Memorial Dr Cam-
bridge Mass
ELECTRONIK—Minneapolis-Honeywell Regulator Co
Industrial Div
ELECTROPULT—Westinghouse Electric Corp
Electrosnap Corp Switch Div 4218-30 W Lake St
Chicago 24 Ill
ELECTROSTART—Lake Shore Electric Corp
ELECTROSTRIP—Building Electric Products Div
I-T-E Circuit Breaker Co
Electrowector Inc 475 Flushing Ave Brooklyn 5 NY
Electrovert Inc 124 E 40 St New York 16 NY
ELECTROWELD—Electric Arc Inc
ELECTROX—Schauer Mfg Corp
ELECTRUNITE—Republic Steel Corp
ELEMEX—Line Material Industries
ELFCO—Everglow Lighting Fixture Co Inc
Elgin National Watch Co Electronics Div 2435 N
Naomi St Burbank Calif
ELIED—Farrelly Co
ELINCO—Electric Indicator Co Inc
ELIPSO—Appleton Electric Co
ELIPTICONE—Art Metal Co
ELIPTISQUARE—Art Metal Co
ELIPTOR—Revere Electric Mfg Co
Elite Glass Co Inc 111 W 22nd St New York 11
NY
Elite Import Co—see Elite Glass Co Inc
Eliza Metal Products Co Box 408 Bridgeville, Pa
ELJAY—Segil (L J) Co
ELKOLOY—Mallory (P R) & Co Inc
ELKONITE—Mallory (P R) & Co Inc
ELKONIUM—Mallory (P R) & Co Inc
Ellanar Chemical Co—see London Chemical Co Inc
ELLARM—Ellenco Inc
ELLBELL—Ellenco Inc
Ellenco Inc 3322 M St N W Washington 7 DC
Elliott Co Jeannette Pa
Elliott Electric Products Co 1513 Olmstead Ave
New York 62 NY
ELLIPTO-FLOOD—Electro Lighting Corp
ELLIPTO-LITE—Benjamin Electric Mfg Co
ELLITE—Ellenco Inc
Elman Co—see Ellenco Inc
Elmann Engineering Co—see Ellenco Inc
ELPAR—Elwell-Parker Electric Co
ELRAD—Westchester Brickette Products Co Inc
Elreco Corp 2900-18 Cornway Ave Cincinnati 25
Ohio
ELSCO-LITES—Electric Lighting Inc
ELTAP—Burdny Corp
ELTEX—Electro-Technical Products Div Sun Chem-
ical Corp
Elwell-Parker Electric Co 4319 St Clair Ave Cleve-
land 3 Ohio
EMCO—Earl Electric Mfg Corp
EMCO—Ender-Monarch Corp
EMERSON—Quiet-Heat Mfg Corp
Emerson Electric Mfg Co 8100 Florissant Ave St
Louis 21 Mo
Emerson-Imperial Lighting Co Loyallhanna Park
Latrobe Pa
Emerson-Pryne Co 140 N Towne Ave (P O Box 698)
Pomona Calif
Emerson Plastics Corp 1383 Seabury Ave Bronx 61
NY
Emerson-Quiet Kool Corp—see Quiet-Heat Mfg Corp
Emhart Mfg Co Skyworker Div 768 Windsor St
Hartford 1 Conn
EMICO—Electro-Mechanical Instrument Co
EMPIRE—Cam-Lok Div Empire Products Inc
EMPIRE—Diamond Expansion Bolt Co Inc
Empire Corp 1566 S 83rd St Milwaukee 14 Wis
Empire Products Inc—Cam-Lok Div Empire Products
Inc
Enameled Metals Co—see Pittsburgh Standard Conduit
Co
ENAMELITE—Republic Steel Corp
ENAMELKOTE—Mark (Clayton) & Co
Ender-Monarch Corp 141 Lanza Ave Garfield NJ
ENDOVOL—Revere Electric Mfg Co
ENDULATOR—Rusgreen Mfg Co
ENDURITE—Crescent Insulated Wire & Cable Co
ENDURPRENE—General Insulated Wire Works Inc
Engelhard (Charles) Inc 850 Passaic Ave East
Newark NJ
Engelhard Industries Inc 113 Astor St Newark 5
NJ
ENGINEATORS—Waukesha Motor Co
Engineering Associates 6547 West Blvd Inglewood
Ore
ENPO—Piqua Machine & Mfg Co
ENTERITE—General Cable Corp
ENITE—Kaiser Aluminum & Chemical Sales Inc
EPCO Electronics Inc 140 Liberty St NY 6 NY
EPI-GLAS—Electro-Technical Products Div
EPOSET—Hardman (H V) Co Inc
Equipment Corp of America 1537 Superior Ave Cleve-
land 14 Ohio
ERICKSON—Thomas & Betts Co
Erickson Power Lift Trucks Inc St Anthony Blvd &
University Ave N E Minneapolis 10 Minn
Erickson Special Equipment Mfg Co—see Erickson
Power Lift Trucks Inc
Erico Products Inc 2070 E 61 Place Cleveland 3
Ohio
Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio
Erie Electric Co Inc 343 Birdsall St Buffalo 2 NY
Erie Malleable Iron Co Bond Div—see Konda Corp

Erie Glass Mfg Co 564 Union Trust Bldg Pittsburgh 19 Pa
 Erie Sales & Mfg Co—see Erie Glass Mfg Co
 Erie Tool Works 12th & Liberty Sts Erie Pa
 Erwood Inc 1770 Berteau Ave Chicago 13 Ill
 ESCO—Electric Specialty Co
 Esco Mfg Co P O Box 1039 Greenville Tex
 ESCORT—Stevens Appliance Truck Co
 ESICO—Electric Soldering Iron Co Inc
 ESS—Electric Service Systems Inc
 Ess Instrument Company—see Photomation Inc
 Ess Specialty Co—see Photomation Inc
 ESSIRON—Electric Service Systems Inc
 Esterline-Angus Co Inc P O Box 596 Indianapolis 6 Ind
 Esty Mfg Co 112 S Sagamore St Chicago 7 Ill
 ETTCO-FLEX—Etcco Wire & Cable Corp
 ETTCO-PLASTIC—Etcco Wire & Cable Corp
 Etcco Wire & Cable Corp 75 Onderdonk Ave Brooklyn 37 NY
 Euclid Electric & Mfg Co 50 Edwards St Madison Ohio
 EUREKA—Morse (Frank W) Co
 EVANOHM—Driver (Wilbur B) Co
 EVER-LOK—Russell & Stoll Co Inc
 EVEREADY—National Carbon Co
 Everett (EA) Inc 35-15 56th St Woodside 77 NY
 Everglow Lighting Fixture Co Inc 332 E Jericho Turnpike Huntington Station NY
 EVERGREEN—Snyder (M L) & Son Inc
 EVERLITE—Curtis Development & Mfg Co
 Everwarm Inc 3600 Pleasant Ridge Rd Knoxville Tenn
 Ewald Instruments Box 124P Kent Conn
 Excel Electric Service Co Inc 2113 S Western Ave Chicago 8 Ill
 Excel Fuse Co 117 W Erie St Pittsburgh 12 Pa
 EXECUTIVE—Linemaster Switch Corp
 Executone Inc 415 Lexington Ave NY 17 NY
 Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa
 Exmet Electrical Corp 127 Marbledale Road P O Box 485 Tuckahoe NY
 EXOLVE—Penetone Co
 EXPANDER—Arro Expansion Bolt Co
 EXPLOSIOMETER—Mine Safety Appliances Co
 EXTRAFLEX—Universal Metal Hose Co
 EXTRUDD-LITE—Magni Flood Inc
 EYE COMFORT—Curtis Lighting Div
 EYE-EASY—Manning (RA) Co Inc
 Eynon-Dakin Co 9900 Freeland Ave Detroit 27 Mich

F

FA—Adam (Frank) Electric Co
 F & F—Trent Inc
 F P—Mallory (P R) & Co Inc
 F W D Corp 105 E 12 St Clintonville Wis
 Fafnir Bearing Co 37 Booth St New Britain Conn
 Fairbanks Co 393 Lafayette St NY 3 NY
 Fairbanks Morse & Co 600 S Michigan Ave Chicago 5 Ill
 FAIRLEADER—Barry (William B) Co
 FAIRWAY—Day-Brite Lighting Inc
 FALCON—Guth (Edwin F) Co
 Falcon Equipment Co 13th St (Box E-255) New Brighton Pa
 Falk Corp 3022 W Canal St Milwaukee 1 Wis
 Falstrom Co 62 Falstrom Court Passaic NJ
 FAMOUS—Goshen Churn & Ladder Inc
 FAN-GLO HEATAIRE—Markel Electric Products Inc
 FAN-PAC—DeBortheat Fans Div American Machine & Metal Co
 FAN-PAC—General Blower Co
 FANFARE—Fanon Electronic Industries Inc
 Fannon (John J) Co 3000 E Woodbridge Detroit 7 Mich
 Fanon Electric Co Inc—see Fanon Electronic Industries Inc
 Fanon Electronic Industries Inc 98 Berriman St Brooklyn 8 NY
 Fanon Electronic Sales Corp—see Fanon Electronic Industries Inc
 FANON-FONE—Fanon Electronic Industries Inc
 FARADAY—Sperli Faraday Inc
 FARADOID—Westinghouse Electric Corp
 FARCO—Farrelloy Co
 Fargo Mfg Co Inc 845 Main St Poughkeepsie NY
 Faries Lamp Div—see AOW Corp
 Faries Mfg Corp—see AOW Corp
 Farmer Electric Co—see Farmer Electric Products Co Inc
 Farmer Electric Products Co Inc 2300 Washington St Newton Lower Falls 62 Mass
 FARMOTOR—Westinghouse Electric Corp
 FARMSTARTER—Westinghouse Electric Corp
 Farrelloy Co 1245 N 26th St Phila 21 Pa
 FAS-TIN—Farrelloy Co
 Fasco Industries Inc Davis & Toppin Sts Rochester 2 NY
 Fasform Div Heller Roberts Mfg Corp 6115 Carnegie Ave Cleveland 1 Ohio
 FASHION—White-Rodgers Co
 Fast-Lok Mfg Co Ash St at Bedford Bridgeport 5 Conn
 FASTHOLD—Mitchell Rand Insulation Co
 Fastway Fasteners Inc 1676 E 28 St Lorain Ohio
 FATHOMETER—Raytheon Mfg Co
 FAULTFINDER—Brundage Co
 FAULTMASTER—Hubbard & Co

FEATHERLITE—Century Lighting Inc
 FEATHERTOUCH—Theiler (H J) Corp
 FEATHERWEIGHT—Goldak Co Inc
 FEATHERWEIGHT—Wing (L J) Mfg Co
 Fedders Corp 58-01 Grand Ave Maspeth NY
 Fedders-Quigan Corp—see Fedders Corp
 Federal Electric Co Inc—see Federal Sign & Signal Corp
 Federal Electric Products Co—see Federal Pacific Electric Co
 Federal Enterprises—see Federal Sign & Signal Corp
 Federal Lighting Corp 1425 Rockwell Ave Cleveland 14 Ohio
 Federal Lighting Div—see Federal Lighting Corp
 Federal Machine & Welder Co 1745 Overland Ave N E Warren Ohio
 Federated Metals Div American Smelting & Refining Co 120 Broadway New York 5 NY
 Federal Pacific Electric Co 50 Paris St Newark 5 N J
 Federal Shock Mount Corp 1060 Washington Ave New York 56 NY
 Federal Sign & Signal Corp 13626 S Western Ave Blue Island Ill
 Federal Telephone and Radio Co—see ITT Components Div
 FEED-IN—Square D Co
 Feedral Corp 125 Barclay St NY 7 NY
 FEEDUCT—Columbia Metal Box Co
 Feiler Engineering & Mfg Co 8026 N Monticello Ave Skokie Ill
 Felco Products Inc 8700 Ambassador Row Dallas 19 Tex
 FEMCO—Fluorescent Equipment & Mfg Co
 Femco Inc Irwin Pa
 FENCE-RITE—Electric Service Systems Inc
 Fenwal Inc Pleasant St Ashland Mass
 FERALOY—Crouse-Hinds Co
 FERMENT—International Ferment Machinery Co Inc
 Ferrara Inc 8106 W Nine Mile Rd Oak Park 37 Mich
 FERRIMAG—Crucible Steel Co of America
 FERRUBRON—Carbolunum Wood Preserving Co
 Fibre Conduit Corp—see Orangeburg Mfg Co Inc
 FIBRE MAT—Minnesota Mining & Mfg Co Irvington Div
 FIBROID—Johns-Manville
 Fibroplug—Star Expansion
 Fidelity Chemical Products Corp 470 Frelinghuysen Ave Newark 12 NJ
 Fidelity Electric Co Inc 332 N Arch St Lancaster Pa
 FILOX—Subox Inc
 FINROD—Tuttle & Kift Inc
 Fire Alarm Thermostat Corp 53 W 23 St New York 10 NY
 Fire Detective Inc 300 Chancellor Ave Newark 12 NJ
 FIRE FUSE—Wind-Way Fan & Ventilator Co
 FIREFLY—Northern Light Co
 FIREWALL—Rockbestos Products Corp
 FIREYE—Electronics Corp of America
 FIREZONE—Rockbestos Products Corp
 FIRMA—Hirschman-Poile Co Inc
 First Lamp Co—see Penelray Corp
 Fischer & Porter Co 335 Westminster Rd Hatboro Pa
 Fisher Berkeley Corp 4224 Holden St Emeryville Calif
 Fisher-Pierce Co 170 Pearl St South Braintree 85 Mass
 Fisher Research Laboratory Inc 1961 University Ave Palo Alto Calif
 5-WAY—Superior Electric Co
 FIXTURE FASHIONS—Moe Light Div Thomas Industries Inc
 FLAME STOP—Phelps Dodge Copper Products Corp
 FLAMENOL—General Electric Co
 FLASH-GLO—Tedgar Products Co
 FLASHMASTER—Carpenter Mfg Co
 FLAVOR SEAL—Fresh'nd-Aire Div Cory Corp
 Fleron (M M) & Son 1220 Yardley Rd Morrisville Pa
 Fletcher Mfg Co 302 E 2nd St Dayton 2 Ohio
 Fleur-O-Lier Mfrs 2116 Keith Bldg Cleveland 15 Ohio
 FLEX-A-PLUG—General Electric Co
 FLEX-A-POWER—General Electric Co
 FLEX-ARC—Westinghouse Electric Corp
 FLEX-ARM—Woodward Machine Co
 FLEX-FIT—Charleston Rubber Co
 FLEX-LOCK—Keystone Electric Mfg Co
 FLEX-SAF—Charleston Rubber Co
 FLEX-SEAL—Columbia Cable & Electric Corp
 FLEXACON—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
 FLEXALARM—Gamewell Co
 FLEXALL—Rome Cable Corp
 FlexAngle Corp 3760 Oakwood Ave (P O Box 418) Youngstown 1 Ohio
 FLEXARAY—Duro-Test Corp
 FLEXARM—Art Specialty Co
 FLEXARM—Flexo International Corp
 FLEXI-SWITCH—Nankervis (Geo L) Co
 FLEXIBLE—Acme Lite Products Co
 FLEXIFONE—DuKane Corp
 FLEXIFORMER—Superior Electric Co
 FLEXILUGS—Frankel Connector Co
 FLEXITE—Markel (L Frank) & Sons
 FLEXLAB—Standard Electric Time Co
 FLEXLEAD—Markel (L Frank) & Sons
 FLEXO—Art Specialty Co
 FLEXO—Flexo International Corp
 Flexo International Corp 3720 N Milwaukee Ave Chicago 41 Ill

FLEXO MASTER—Art Specialty Co
 FLEXON—Flexomix Corp
 Flexonics Corp 1430 S Third Ave Maywood Ill
 FLEXSEAL—Columbia Cable & Electric Corp
 FLEXSHIELD—American Electric Cable Co
 FLEXTEEL—Utilities Service Co
 FLEXTING—Capewell Mfg Co
 FLICKER-FLAME—Aerolux Lights Corp
 FLIP-SEAL—Rodalie Mfg Co Inc
 FLIP-TITE—Royal Electric Corp
 FLIPON—Westinghouse Electric Corp
 FLITE-CHEK—Ramset Fastening System
 FLO-LINER—Wheeler Reflector Co
 FLO-LITE—Burton Mfg Co
 FLO-SIG—New Jersey Meter Co Inc
 FLOOR MASTER—Lewis-Shepard Products Inc
 FLORAFLOOD—Steber Mfg Co
 FLORALAMP—Steber Mfg Co
 FLORALITE—Steber Mfg Co
 Fluorescent Equipment Supply Co—see K-B Lighting Mfg Co
 FLOURITE—K-B Lighting Mfg Co
 FLOW-COLD—Acme Industries Inc
 FLOW-MIZER—Acme Industries Inc
 FLOW-PAC—Acme Industries Inc
 FLOW-TEMP—Acme Industries Inc
 FLOW-TEMP—Acme Industries Inc
 Flowco B B Mfg Co 1217 Spring Garden St Philadelphia 23 Pa
 Flower Mfg Co Inc—see Flower (D B) Mfg Co
 FLOWER LIGHT—Aerolux Lights Corp
 FLOWRATOR—Fischer & Porter Co
 FLUID SHAFT—Stanley Electric Tools
 FLUO-LITER—Guth (Edwin F) Co
 FLUOMERIC—Duro-Test Corp
 FLUOR-DE-LE—Segil (L J) Co
 FLUOR-O-TESTER—Electric Re-Light Co
 Fluores-O-Lite Co Evans Terminal North Broad St Hillside 5 NJ
 Fluorescent Equipment & Mfg Co 5105 Cowan Ave Cleveland 27 Ohio
 Fluorescent Fixtures of California 352 Shaw Rd South San Francisco Calif
 FLUORESIGN—Revere Electric Mfg Co
 FLUR-O-LAMP—Ladbury Co Inc
 FLUR-O-LOCKS—Ladbury Co Inc
 FLUR-O-LUX—Fullerton Mfg Co
 FLURO-SPRAY—Duro-Test Corp
 FLUSH CALL—Edwards Co Inc
 FLUSHLITES—Drake Mfg Co
 FLUX-N-SOLDER—Johnson Mfg Co Inc
 FLYING FARMER—Line Material Industries
 FOAMFLEX—Phelps Dodge Copper Products Corp
 FOAMLINE—Plastoid Corp
 FOAMTUBE—Plastoid Corp
 FOCALITE—Amplex Corp
 FOCUS LOK—Westinghouse Electric Corp Lamp Div
 FOLD-A-WAY—Patent Scaffolding Co Inc
 Folsom Co Inc 3104 Oak Lane Dallas 26 Tex
 FOTROL—General Control Co
 FORCE-FLUO—Trane Co
 Foreord Electric Co Inc Bethel Conn
 FORLAMP—General Electric Co
 FORMBOND—Belden Mfg Co
 FORMEX—General Electric Co
 FORMEZE—General Cable Corp
 FORMLON—General Cable Corp
 FORMVAR—Anaconda Wire & Cable Co
 Forsberg Mfg Co 125 Seaview Ave Bridgeport 1 Conn
 Forston Co 2117-2119 Judway (P O Box 10231) Houston 18 Tex
 FORTY-SIXTY—Curtis Lighting Div
 FORWAY—US Expansion Bolt Co
 FOSTERLITE—Westinghouse Electric Corp
 Foster Pressed Steel Corp N Main St Fostoria Ohio
 FOTA-LITE—Corning Glass Works
 FOTOLECTRIC—Worner Electronic Devices
 4 POINT—Nye Tool Co
 FOUR-STAR—Johns-Manville
 Four Wheel Drive Auto Co—see F W D Corp
 Fox Gun Co—see Fox Products Co
 Fox Products Co 4720 N 18 St Phila 41 Pa
 FRAHM—Biddle (James G) Co
 France Mfg Co 10325 Berea Rd Cleveland 2 Ohio
 Francilite Co—see Federal Lighting Corp
 Frankel Connector Co 27 Vestry St New York 13 New York
 Franklin Electric Co Inc 400 E Spring St Bluffton Ind
 TRANSFORMER—France Mfg Co
 FREE-FLEX—Pines Engineering Co Inc
 Fresh'nd-Aire Co—see Fresh'nd-Aire Div Cory Corp
 Fresh'nd-Aire Div Cory Corp 221 N LaSalle St Chicago 111
 Frick Co Waynesboro Pa
 Frick-Gallagher Mfg Co 110 S Michigan Ave Wellston Ohio
 FRIGID-START—Duro-Test Corp
 Frigid Inc 128-168 32nd St Brooklyn 32 NY
 Frigidaire Div General Motors Corp 300 Taylor St Dayton 1 Ohio
 FRIGIDFLEX—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
 Frink Corp 211 63rd St Brooklyn 20 NY
 Frisbie (HC) Co 1120 E Pico Blvd Los Angeles 21 Calif
 FROG-LEG—Allis-Chalmers Mfg Co
 FULL-O-LITE—Fullerton Mfg Co
 FULL-O-PEP—Standard Electric Co Inc

Fullerton Mfg Co Willard Rd Norwalk Conn
Fullman Mfg Co 1209-1215 Jefferson St Latrobe Pa
Furnas Electric Co 1067 McKee St Batavia Ill
FUSETRON—Bussmann Mfg Div McGraw-Edison Co
FUSISTOR—S & C Electric Co
FUSTAT—Bussmann Mfg Div McGraw-Edison Co
FUTURA—AOW Corp
FUTURA—Electro-Products Mfg Co
FUTURA—Metalcraft Products Co Inc
FUTURLITER—Guth (Edwin F) Co
FYBEROID—Wilmington Fibre Specialty Co
FYR-CRY—SAFA Alarm Div Inc Fyr-Fyter Co
FYR-FYTER—SAFA Alarm Div Fyr-Fyter Co

G

GAC—General Alliance Corp
GC—General Cement Mfg Co
GE—General Electric Co
G-H Girard Hopkins
GL—Lidsen of North Carolina Inc
GM Diesel 12400 W Outer Dr Detroit 28 Mich
GS—General Scientific Equipment Co
GSF—General Steel Fittings Co
GST—Guth (Edwin F) Co
G & W Electric Specialty Co 3500 W 127 St Blue Island Ill
G/W—Great Western Div
Gaffers & Sattler—see Mission Appliance Corp
Gaines Collins Co—see Collins Machinery Corp
GALV-KROM—Steel City Electric Co
GALVAKOTE—Mark (Clayton) & Co
Galvin Mfg Co—see Motorola Communications & Electronics Inc
GALVINOLEUM—Rust-Oleum Corp
GALVITE—Republic Steel Corp
Ganewell Co Newton Upper Falls 64 Mass
GAR-SEE-LITE—Garcy Lighting Div Garden City Plating & Mfg Co
GARAGE-LITE—Woodward Machine Co
Garcy Lighting Div Garden City Plating & Mfg Co 2475 Elston Ave Chicago 47 Ill
Garden City Fan Co 801 N Eighth St Niles Mich
Garden City Plating & Mfg Co—see Garco Lighting Div
GARDENLITE—Fostoria Pressed Steel Corp
GARDINER—Federated Metals Div American Smelting & Refining Co
Gardner Bender Co 5448 N 24th Pl Milwaukee 9 Wis
Gardner Electric Mfg Co—see Federal Pacific Electric Co
Gardner Products Co 15244 Aubrey Detroit 39 Mich
Gaston Power Tools 999 Ridge Rd Thornton Ill
Gates Electronic Co 2090 Barnes Ave Bronx 62 NY
Gateway Engineering Co 3233 W Grand Ave Chicago 51 Ill
GATEWAYDUCT—Gateway Engineering Co
GEAREDUCTS—Electra Motors Inc
Gedney Electric Co Americas Bldg Radio City NY 20 NY
GEM DANDY—Buckels (Chris) Inc
Gem Electric Mfg Co Inc 237 37th St Brooklyn NY
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich
GEN-PRO—General Products Corp
GENCATHENE—General Cable Corp
GENCATROL—General Cable Corp
General Alliance Corp 2105 Moore St San Diego Calif
General Blower Co 8610 Ferris Ave Morton Grove Ill
General Cable Corp 730 Third Ave NY 17 NY
General Cable Corp Clifton Conduit Div—see Clifton Conduit Corp
General Cement Mfg Co 400 S Wyman St Rockford Ill
General Control Co 1200 Soldiers Field Rd Boston 34 Mass
General Controls Co 801 Allen Ave Glendale Calif
General Electric Co
Apparatus Sales Div Schenectady 5 NY
Chemical Materials Dept 24 River Rd Schenectady 5 NY
Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn
Commercial & Industrial Air Conditioning Dept 5 Lawrence St Bloomfield NJ
Conduit Products Dept 1285 Boston Ave Bridgeport 2 Conn
Distribution Assemblies Dept 41 Woodford Ave Plainville Conn
Home Heating & Cooling Dept Troup Highway Tyler Tex
Laminated Products Dept Coshocton Ohio
Large Lamp Dept Nela Park Cleveland Ohio
Miniature Lamp Dept Nela Park Cleveland Ohio
Room Air Conditioner Dept Appliance Park Louisville 1 Ky
Silicone Products Dept Waterford NY
Technical Products Dept Electronics Park Syracuse NY
Weathertron Dept 5 Lawrence St Bloomfield NJ
Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn
Wiring Device Dept 95 Hathaway St Providence RI
General Hardware Mfg Co Inc 80 White St NY 13 NY
General Insulated Wire Works Inc 69 Gordon Ave Providence 5 RI
General Lamps Mfg Corp—see AOW Corp

General Lighting Co 248 McKibbin St Brooklyn 6 NY
General Luminescent Corp—see Poliak Luminescent Corp
General Metals Inc 858 Goldsboro Greensboro N C
General Products Corp 107 Salem St Union Springs NY
General Radio Co West Concord Mass
General Scientific Equipment Co 7516 Limekiln Pike Philadelphia 50 Pa
General Steel Fittings Co 1321 21st St Racine Wis
General Switch Co 45 Roebing St Brooklyn 11 NY
GENERALITER—Duro-Test Corp
GENEMOTOR—Carter Motor Co
GENESCOPE—Simpson Electric Co
GENIE—Alliance Mfg Co Inc
GEON—Goodrich (B F) Chemical Co
Geophysical Instrument Co—see Georator Corp
Georator Corp Manassas Va
GEORGE—Clark (George P) Div Cragin & Wilkins Co Inc
Gerlinger & Sons Mfg Corp Peekskill NY
Gets-A-Lite Co 3865 N Milwaukee Ave Chicago 41 Ill
GIANT—Burgess Battery Co
Gibson Mfg Co 1919 Piedmont Circle NE Atlanta Ga
Gibson Refrigerator Co 515-615 W Williams St Greenville Mich
GIMBAL RING—Alexander-Tagg Industries Inc
GIMBALITE—Alexander-Tagg Industries Inc
Gird-Hopkins 1000 40th Ave Oakland 1 Calif
Gisholt Machine Co 1245 E Washington Ave Madison 10 Wis
Glade Mfg Co 1632 W 75th Pl Chicago 20 Ill
GLAS-VAR—Electro-Technical Products Div
GLASSBAKE—McKee Div Thatcher Glass Mfg Co Inc
GLASDRILL—Star Expansion
GLASPUK—Atlas Actos Co Inc
GLASSEAL—Pyramid Electric Co
GLASSHEAT—Continental Radiant Glass Heating Corp
GLASSURFACED—Kirlin Co
GLASTERRA—Chase & Sons Inc
Glastic Corp 4321 Glenridge Rd Cleveland 21 Ohio
GLAZON—Triangle Conduit & Cable Co Inc
Gleason (J L) & Co—see Gleason Reel Corp
Gleason Reel Corp 740 N Plankinton Ave Milwaukee 3 Wis
Gleason Sales Co Inc 5809 W Montrose Ave Chicago 34 Ill
Glen Co—see M & T Welding Products Corp
Glen Equipment Co—see M & T Welding Products Corp
Glen Roberts Co—see M & T Welding Products Corp
GLENDALE—King Refrigerator Corp
GLIDE-A-LITE—Globe Lighting Products Inc
GLO-GUARD—Hubbard & Co
GLO PLUG—Industrial Devices Inc
GLO-POINT—Vemaline Products Co
GLO-RAY—Curtis Lighting Div Curtis-Air Brite
GLO-RITE—Phillips (Oscar) Co
Globe Light Carborundum Co Niagara Falls NY
Globe Lighting Products Inc 1710 Flushing Ave Brooklyn 37 NY
GLOMASTER—Emerson-Plyne Co
GLOW LITE—Spencer Industries
GLOWLITE—Laroc Inc
GLYPITAL—General Electric Co
Godfrey Mfg Co 1633 N Halsted St Chicago 16 Ill
Goetz (J F) Mfg Co 162 South St Hartford Wis
GOGETTER—Revolver Co
GOLD—Kaiser Aluminum & Chemical Sales Inc
GOLD CROWN—Pioneer Gen-E-Motor Co
GOLD MEDAL—Patent Scaffolding Co Inc
GOLD-N-RING—National Acme Co
GOLD-O-MATIC—Luxor Lighting Products Inc
GOLD SEAL—Jenkins Bros Rubber Div
Goldak Co Inc 1544 W Glenoaks Blvd Glendale 1 Calif
Goldberg & O'Brien Electric Co—see Ther Electric & Machine Works
GOLDEN SUNBURST—Globe Lighting Products Inc
GOLIATH—David's Gloves Inc
Good-Air Electric Mfg Co 112 W First St Ogallala Neb
Good Mfg Co Inc 1015 N Halsted St Chicago 22 Ill
Goodall Rubber Co 493 Whitehead Rd Trenton NJ
Goodrich (B F) Chemical Co 3135 Euclid Ave Cleveland 15 Ohio
Goodrich Electric Co—see Appleton Electric Co
GOPI—Bronze Bearings Inc
Goshen Churn & Ladder Inc Goshen Indiana
GOTHAM—U S Gauge Div American Machine & Metals Inc
Gould-National Batteries Inc Trenton 7 NJ
GOVOHM—Electric Regulator Corp
Graham (Phillip E) Co Inc—see Air-Hydraulics of Indiana
Graham Mfg Corp 152 Second Ave Needham Hts 94 Mass
GRAIN-ORIENTED—Vickers Inc
GRAMIX—United States Graphite Co
Gran-Cal Inc—see Calvert Co
GRATELITE—Guth (Edwin F) Co
Gray Instrument Co Mill Rd Andalusia Pa
Graybar Electric Co Inc 420 Lexington Ave NY 17 NY
Grayhill Inc 551 Hillgrove Ave La Grange Ill
GRE-A-NO—Great Northern Mfg Corp
Great Northern Mfg Corp 1056 N Wood St Chicago 22 Ill
Great Western Div Interlectric Corp 1401 Lexington Ave Warren Pa
Green Ball Bearing Co 9518 Cassius Ave Cleveland 5 Ohio

GREEN GUARD—Security Mfg & Contracting Co
Greenlee Tool Co 2136 Twelfth St Rockford Ill
Greibach Instruments Corp Metuchen NJ
GRENADIER—Wakefield Co
Grieve-Hendry Co Inc 1401-17 W Carroll Ave Chicago 7 Ill
Grinnell Co Inc 260 W Exchange St Providence 2 RI
GRIP-FLEX—Copperweld Steel Co Wire & Cable Div
GRIP KLIP—Excel Fuse Co
GRIP-KLIPS—Specialties Inc
Grip-Tite Mfg Co 115 W Jefferson St Winterset Iowa
GRIP-TYPE—Thiel Tool & Engineering Co
GRIPPEZ—Phelps Dodge Copper Products Corp
GRIPPO—Barrett Varnish Co
GRIPZEN—Star Expansion
GRIZZLY—Kaiser Aluminum & Chemical Sales Inc
GRIZZLY—Pucel Enterprises Inc
GRO-QUICK—Wrap-On Co
GROUND-GARD—Anderson (Albert & JM) Mfg Co
GROUND-OHMER—Sticht (Herman H) Co Inc
GROUNDOMETER—Borden Engineering Div M J Johnson Aircraft Engineering Co
GROUNDULET—Crouse-Hinds Co
Gruber Bros Inc 125 South First St Brooklyn 11 NY
Gruber Lighting—Gruber Bros Inc
GUARANTEE—Partrick & Wilkins Co
GUARDIAN—Dura Electric Lamp Co Inc
GUARDIAN—General Cable Corp
Guardian Electric Mfg Co 1621 W Walnut St Chicago 12 Ill
Guardian Light Co 500 N Blvd Oak Park Ill
GUARDSMAN—West Instrument Corp
Guggemos (K) Co—see Kenworth Co
GUIDE-LINED—Republic Steel Corp
GUIDE RAY—Everwarm Inc
GULF STREAM—Signal Electric Div King-Seeley Corp
Gulton Industries Inc Alkaline Battery Div Metuchen NJ
GUSCO—Gustavson Inc
Gustavson Inc 8600 Chestnut St Kansas City 30 Mo
Guth (Edwin F) Co 2615 Washington Blvd St Louis 3 Mo
GUTHLITE—Guth (Edwin F) Co
Guy GRIP—Preformed Line Products Co
Guyan Machinery Co Inc Box 150 Logan W Va
Gwilliam Co 360 Furman St Brooklyn 1 NY
GYMLITE—Stebor Mfg Co Inc
GYRO-LITE—Swivelco Co Inc
GYROL—American-Standard

H

H-B Instrument Co 4303 American St Phila 40 Pa
H & H—Arrow-Hart & Hegeman Electric Co
H-P—Hatheway & Patterson Co Inc
Haartz-Mason Inc 270 Pleasant St Watertown 72 Mass
HABIR BUS—Phelps Dodge Copper Products Corp
HABIRDRY—Phelps Dodge Copper Products Corp
HABIRSHAW—Phelps Dodge Copper Products Corp
Haddco Aluminum Products Co P O Box 128 Littlestown Pa
Haertel (Walter) Co 2840 4th Ave So Minneapolis Minn
Haft & Sons Inc 950 Kent Ave Brooklyn 5 NY
HAFTSON—Haft & Sons Inc
HAIRPINLINE—Illuminating Engineering Co
Haley Electronics Co 57 William Street New York 5 New York
Halex Die Casting Co 8640 Bessemer Cleveland 27 Ohio
Haley (R G) & Co Inc 767 Spitzer Bldg Toledo 4 Ohio
Haley (R G) International Corp Inc—see Haley (R G) & Co Inc
HALIDE—Turner Brass Works
HAM-R-TOOL—Fastway Fasteners Inc
Hamilton Caster & Mfg Co 1519 Dixie Highway Hamilton Ohio
Hamilton Fan & Blower Co 2644 Colerain Ave Cincinnati 14 Ohio
HAMMER-HEAD—Perfelite Co
HAMMER-LOCK—Perfelite Co
HAMMERDRIVE—Omak Industries Inc
HAMMERKORE—Tilden Tool Mfg Co
HAMMETER—Simpson Electric Co
HAMR PIN—Star Expansion
HAMRDRIVER—Star Expansion
HAMRFLUTE—Star Expansion
HAMRSTUD—Star Expansion
HAMRTWIST—Star Expansion
HAMSWITCH—Mallory (P R) & Co Inc
HAMTENNA—Illumitronic Engineering
HANDI-HEET—Smith Welding Equipment Corp
HANDI-UNIT—Bernard-Franklin Co Inc
HANDIE-MICRO-TALKIE—Motorola Communication & Electronics Inc
HANDIE-TALKIE—Motorola Communications & Electronics Inc
HANDY ANGLE—Price & Rutzebeck
Handy Angle Div Lug-All Co 355 Lancaster Ave Haverford Pa
HANDY-CRAFT—Westinghouse Electric Corp
HANG-RITE—U S Expansion Bolt Co
HANK'S—Klein (Mathias) & Sons
Hanksraft Co Control Div Reedsburg Wis
Hansen Mfg Co Inc PR #1 Princeton Ind
HAP-E-LITE—Alkco Mfg Co

HAPCO—Hubbard & Co
HARD-TUNG—Capewell Mfg Co
Harder (Donald C) Co 3710 Midway Dr San Diego 10 Calif
Hardman (H V) Co Inc 571 Cortlandt St Belleville 9 NJ
HARDSET—Hardman (H V) Co Inc
HARDY TOOLS—Interstate Drop Forge Co Special Products Div
Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis
Harold Electric Co 210 E Alder St Walla Walla Wash
Harper Electric Furnace Corp 39 River St Buffalo 2 NY
Hart & Hegeman—see Arrow-Hart & Hegeman Electric Co
HART-LOCK—Arrow-Hart & Hegeman Electric Co
Hart Mfg Co 164 Bartholomew Ave Hartford Conn
Hartford Blower Co—see Sterling Blower Co
Hartzell Propeller Fan Co S Engle Ave Piqua Ohio
HARTZITE—Hartzell Propeller Fan Co
HARVEL—Minnesota Mining & Mfg Co Irvington Div
NASCO—National Band & Tan Co
Masco Electric Corp 30 Grove Ave New Rochelle NY
Hastings Air Conditioning Co Inc 108 S Colorado Ave Hastings Neb
HATCORONE—Hatfield Wire and Cable Div Continental Copper & Steel Industries Inc
HATEMIP—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
HATEX—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
Hatfield Wire and Cable Div Continental Copper & Steel Indus Inc 487 Hillside Ave Hillside 5 NJ
HATFLEX—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
Hathaway & Patterson Co Inc 15 County St Mansfield Mass
HATROL—Hatfield Wire and Cable Div Continental Copper & Steel Indus Inc
HATSEAL—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
HATVINOL—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
HAVEN'S—Klein (Mathias) & Sons
Hayden Twist Drill Co Manila Ark
Hayden (A W) Co 232 N Elm St Waterbury Conn
Haydon Div General Time Corp 245 E Elm St Torrington Conn
Hayes (C I) Inc 800 Wellington Ave Cranston 10 RI
HAYMOLITE—Stebber Mfg Co
Hays Mfg Co Industrial Sales Div 12th and Liberty Sts Erie 6 Pa
Hazard Insulated Wire Works—see Okonite Co
HAZARDCHECK—Westline Products Div Western Lithograph Co
HAZARDSTRIP—Westline Products Div Western Lithograph Co
HEADERDUCT—Gateway Engineering Co
HEADERDUCT—Walker Brothers
Header-Ruff Co Water Level Controls Div 2255 University Ave St Paul 14 Minn
HEAT-A-LITE—Nukone Inc
HEAT KILLERS—Coppus Engineering Corp
HEAT-N-LITE—Ampere Industries
HEAT-R-FAN—Dominion Electric Corp
Heat-Timer Corp 657 Broadway New York 12 NY
HEATRAIR—Market Electric Products Inc
HEATMOBILE—Siebring Mfg Co
Heatmore Inc 651 Driggs Ave Brooklyn 11 NY
HEATSUM—Roberson Inc
Heatable Corp—see Heatable Dept
Heatable Dept Coolerator Div McGraw-Edison Co Albion Mich
HEATZONE—Rockbestos Products Corp
HEATX—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
Hein-Werner Corp 1200 National Ave Waukesha Wis
Heinemann Electric Co Pennsylvania Ave & Plum St Trenton 2 NJ
Heinz Electric Co 685 Lawrence St Lowell Mass
Heller Co—see Heller Industrial Fastener Div Heller Roberts Mfg Corp
Heller Bros Co—see Heller Tool Co
Heller Industrial Fastener Div Heller Roberts Mfg Corp 6115 Carnegie Ave Cleveland 1 Ohio
Heller Tool Co Heller Div Newcomerstown Ohio
Helwig Co—see Helwig Carbon Products Inc
Helwig Carbon Products Inc 2550 N 30 St Milwaukee 10 Wis
Helwig Mfg Co—see Interstate Drop Forge Co
HEMINGRAY—Kimbale Glass Co
Henderson Electric Co Ampere Station East Orange NJ
Henderson-Hazel Corp 13601 Euclid Ave Cleveland 12 Ohio
Hendrix Wire & Cable Corp Milford NH
Henkel-Clauss Co—see Clauss Cutlery Co
HERCULES—Acromark Co
HERCULES—Linmaster Switch Corp
HERCULES—Whitman & Barnes Div United Drill & Tool Corp
HERCULON—Dossert Mfg Corp
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio
HESS BRIGHT—SKF Industries Inc
Hesse (W A) & Co—see Hesse Products Co
Hesse Products Co 600 W Seventh St Reno Nev
Hessel (W F) Co Inc 74 Beekman St NY 38 NY
Hewi Duty Electric Co P O Box 563 Milwaukee 1 Wis
Hewitt-Robins Inc 666 Glenbrook Rd Stamford Conn
Hewson (John) Co—see Hewson Co Inc
Hewson Co Inc 443 Broad St Newark 2 NJ
Hexacon Electric Co 161 W Clay Ave Roselle Park NJ
HEXCAST—U S Expansion Bolt Co
Hexcel Products Inc 2332 4th St Berkeley 10 Calif
HEXSEAL—Hexacon Electric Co
HEXSEAL—Automatic & Precision Mfg Co
HEXTHODE—Luxor Lighting Products Inc
HEYCO—Heyman Mfg Co
Heyman Mfg Co Kenilworth 20 NJ
HI—Holub Industries Inc
HI-AMP—Lenco Inc
HI-CAP—Bussmann Mfg Div McGraw-Edison Co
HI-CORE—Alpha Metals Inc
HI-EF—Kent Lighting Corp
HI-FLOOD—Radiant Lamp Corp
HI-FLUX—Annis (R B) Co
HI-HEAT—Radiant Lamp Corp
HI-HOIST—Lantz Mfg Co Inc
HI-LAG—Ware Fuse Corp
HI-LO—Industrial Devices Inc
HI-LO-FLEX—AOW Corp
HI-MEG—Dolph (John C) Co
HI-RANGER—Mobile Aerial Towers Inc
HI-REACH—Economy Engineering Co
HI-Scale Products Corp 132 W 22 St New York 11 NY
HI-SPEED—Dockson Corp
HI-SPEED—Molly Corp
HI-SPOT—Radiant Lamp Corp
HI-STRENGTH—Blackburn (Jasper) Corp
HI-SUPERTITE—Engelhard (Charles) Inc
HI TEMP—Rockbestos Products Corp
HI-TEMP—Rome Cable Corp
HI-THEM—Dolph (John C) Co
HI-TORK—Electro-Mechanical Instrument Co
HI-TREADLITE—Linmaster Switch Corp
HI-TRONIC—Bliss Electronic Corp
HI-VOLT—Industrial Devices Inc
HIBOY—Holophane Co Inc
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio
HICYCLE—Chicago Pneumatic Tool Co
Hiersgell Bros—see H-B Instrument Co
HIGH BAY—Curtis Lighting Div Curtis-Ailbrite Inc
HIGH SPEED—Capewell Mfg Co
Highway Trailer Co 405 E Fulton St Edgerton Wis
Hill (Walter P) Inc 12183 Telegraph Rd Detroit 19 Mich
Hill Transformer Co Inc 1030 Washington St San Carlos Calif
Hillsdale Commutator Co—see Toledo Commutator Co
HILTI—Driver (Wilbur B) Co
Hilti Rapid Fastening Systems Inc 73 Southfield Ave Stamford Conn
Hindle Transformer Co Inc Woods Church Rd Flemington NJ
HINJON—Thomas & Betts Co
HIPOD—Peschel Electronics Inc
HIPOD—Mueller Electric Co
Hirschman-Pohle Co Inc 300 Lent Ave Le Roy NY
Hitamp Wires Inc 1200 Shames Dr Westbury NY
HIWRAP—Hitamp Wires Inc
HO—Phelps Dodge Copper Products Corp
Hobart Bros Hobart Square Troy 1 Ohio
Hoffman Engineering Corp 1050 Tyler St Andover Mass
HOIST-ALL—Coffing Hoist Div Duff-Norton Co
HOLD-DEM—Electric Service Systems Inc
Holan Corp 4100 W 150 St Cleveland 35 Ohio
Holan (J H) Corp—see Holan Corp
Holcor Metal Fabricating & Finishing Corp—see House-O-Lite Corp
Hold-DEM Electric Fencer Co—see Electric Service Systems Inc
HOLD-IT—Arro Expansion Bolt Co
HOLD-IT—Madison Equipment Co
HOLD-TITE—Titchener (E H) & Co
HOLDA-LITE—Hoffman Engineering Corp
HOLDFAST—Ludlow Mfg & Sales Co
HOLDTITE—United States Rubber Co
HOLE-SHOOTER—Milwaukee Electric Tool Corp
HOLIFAST—Dayton Rubber Co
HOLIDAY—Day-Brite Lighting Inc
Hollands Mfg Co—see Erie Tool Works
Hollingsworth (John R)—see Hollingsworth Co
Hollingsworth Co Solderless Terminal Div Box 430 Phoenixville Pa
HOLLOSHAFT—U S Electrical Motors Inc
HOLLOFLUX—Holophane Co Inc
Holophane Co Inc 342 Madison Ave New York 17 NY
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass
Holtzer-Cabot Electric Co—see Holtzer-Cabot Div National Pneumatic Co Inc
Holub Industries Inc 442 Elm St Sycamore Ill
HOLZIN—Star Expansion
HOM-A-LARM—Castle Engineering Co
Homelite Corp—see Homelite Div Textron Inc
Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY
Homer Commutator—see Toledo Commutator Co
HOMOCORD—Raybestos-Manhattan Inc
HOMOFLEX—Raybestos-Manhattan Inc
HONEYLITE—Hexcel Products Inc
Hoover Co—see Kingston Conley Inc
Hopax Electric Inc 547 Greenwich St NY 13 NY
Hope Electrical Products Co Inc 27 Long Ave Hillside NJ
HORSE HEAD—New Jersey Zinc Co
Hose-McCann Corp—see Hose-McCann Telephone Co Inc
Hose-McCann Telephone Co Inc 25th St & 3rd Ave Brooklyn 32 NY
HOSPITAL-LITE—Swiveler Co Inc
HOSPITALITY LIGHT—Versen (Kurt) Co
Hosfeld Mfg Co 460 W Third St Winona Minn
HOT ROD—Pyrosil Inc
HOTABLE—Salton Mfg Co Inc
HOTKOTE—Mark (Clayton) & Co
HOTPACK—Electric Hotpack Co Inc
Hotpoint Co 5600 W Taylor St Chicago 44 Ill
HOTRAY—Salton Mfg Co Inc
House-O-Lite Corp 2430 S Ashland Ave Chicago 8 Ill
HOW-ELL-DOR—Howell Mfg Co
Howard Electric Co 1950 Ruby St Melrose Park Illinois
Howard Industries Inc 1760 State St Racine Wis
HOWARDUCT—Howard Electric Co
Howell Electric Motors Co 409 N Roosevelt Howell Mich
Howell Mfg Co 21 N Morehall Rd Paoli Pa
HOWES—Klein (Mathias) & Sons
Hoyt Electrical Instrument Works Inc—see Burton-Rogers Co
Hoyt Mfg Corp Forge Rd Westport Mass
Hub Electric Co 2255 W Grand Ave Chicago 12 Ill
HUB MOUNT—Hubbard & Co
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa
Hubbard Spool Co—see American Pulley Co
Hubbell (Harvey) Inc State St & Bostwick Ave Bridgeport 2 Conn
HUBBELLOCK—Hubbell (Harvey) Inc
HUBEYE—Hubbard & Co
HUBRAK—Hubbard & Co
Hudson Lamp Co 528 Elm St Kearny NJ
Hufnagel Co Engineered Products Div 2701 Spring Grove Ave Cincinnati 25 Ohio
Hughes Bros Inc Seward Neb
Hughes Products Hughes Aircraft Co International Airport Station Los Angeles 45 Calif
Hughey & Phillips Inc 3200 North San Fernando Blvd Burbank Calif
Hullhorst Micro Tool Co—see Hullhorst Tools Inc
Hullhorst Tools Inc 1915 Nebraska Ave Toledo 7 Ohio
HUMID-I-METER—Walton Laboratories Inc
HUMIDOLAN—Star Porcelain Co
HUMIDOMIST—Supreme Electric Products Co
HUMP-DRIVE—Thiel Tool & Engineering Co
Hunter (H D) & Co—see Hunter Tools
Hunter Div Robbins & Myers Inc 2500 Frisco Ave Memphis 14 Tenn
Hunter Fan & Ventilating Co—see Hunter Div Robbins & Myers Inc
Hunter (R N) Sales Co—see Hunter Tools
Hunter Tools 9851 Alburtil St Santa Fe Springs Calif
HUNTERMAN—Kedman Co
Huntsman Welding Shield Co—see Kedman Co
Hupert (K H) Co 6830 S Cottage Grove Ave Chicago 37 Ill
HUSKY—Price Electric Corp
Husky Products Inc 5300 Vine St Cincinnati 17 Ohio
Mussey (CG) & Co 2850 Second Ave Pittsburgh 19 Pa
HY-A-SIL—Miller (Sanford) Co
Hyatt Bearings Div General Motors Corp Harrison NJ
HYDRA-LIFT—Pitman Mfg Co
HYDRALLOY—Okun (A L) Co Inc
HY-CAP—Illinois Condenser Co
HY-LITE—American Concrete Corp
HY-LITER—Guth (Edwin F) Co
HY-LOAD—Hyatt Bearings Div General Motors Corp
HY-RE-FLEC—Globe Lighting Products Inc
HY-SOL—Charleston Rubber Co
HY-TIN—Farrelly Co
HY-V—DeBothezat Fans Div American Machine & Metals Co
HYCASTE—Premax Products Div Chisholm-Ryder Co Inc
HYDENT—Burndy Corp
HYDRAGRIP—Armstrong-Bray & Co
HYDRAKOTE—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
HYDRANOID—General Control Co
HYDRATEMP—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
HYDRATUBE—Recora Co Inc
HYDRO-THERM—Paranite Wire & Cable Div Essex Wire Corp
HYDROELECTRIC—Lift Trucks Inc
HYDROSEAL—Paranite Wire & Cable Div Essex Wire Corp
HYDROSEC—Kaiser Aluminum & Chemical Sales Inc
HYDROPERSE—Fidelity Chemical Products Corp
HYDUTY—Davidson Fan Co
HYGRADE—Market (L Frank) & Sons
Hykon Mfg Co 163 E State St (P O Box 923 EP) Alliance Ohio
HYLINK—Burndy Corp
HYLUG—Burndy Corp
HYPERCORE—Moloney Electric Co
HYPERISIL—Westinghouse Electric Corp
HYPOT—Associated Research Inc
HYPRESS—Burndy Corp
HYPRO—Hypro Engineering Inc
Hypro Engineering Inc 700 39th Ave N E Minneapolis 21 Minn

HYRAMOTOR-General Controls Co
HYSPEAR-Midland Paint & Varnish Co
HYSPLICE-Burndy Corp
Hyster Co 2902 N E Clackamas St Portland 8 Ore
HYSTERSET-Ward Leonard Electric Co
HYTOOL-Burndy Corp
HYTORK-Ailis-Chalmers Mfg Co
HYVOLT-Crescent Insulated Wire & Cable Co

I
I-EZE-Artistic Lamp Mfg Co Inc
I-LINE-Alien Cooler & Ventilator Inc
I A Co-Industrial Automation Corp
IBM-International Business Machines Corp
IEFCO-International Electric Fence Co Inc
IDI-Industrial Devices Inc
IEP-Illinois Edison Porcelain
IMC-Insulation Mfrs Corp
IMP-Pyramid Electric Co
IMP-Superior Insulating Tape Co
IPC-Independent Protection Co Inc
IPF-Industrial Plastic Fabricators Inc
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa
I-T-E Circuit Breaker Co Greensburg Div P O Box 98 Greensburg Pa
I-T-E Circuit Breaker Co Switchgear Div 1924 Hamilton St Philadelphia 30 Pa
I-T-E Circuit Breaker Co Victor Insulators Div Victor NY
ITT Components Div P O Box 412 Clifton NJ
IXL-Collyer Insulated Wire Co
Ideal Commutator Dresser Co-see Ideal Industries Inc
Ideal Electric and Mfg Co East First St Mansfield Ohio
Ideal Industries Inc 5136 Park Ave Sycamore Ill
Ideal-Simplifit Fittings Inc 5136 Park Ave Sycamore Ill
IDEALARC-Lincoln Electric Co
IG-DUALAIR-Ilg Electric Ventilating Co
Ilg Electric Ventilating Co 2850 N Pulaski Rd Chicago 41 Ill
ILGETTE-Ilg Electric Ventilating Co
ILGUENT-Ilg Electric Ventilating Co
ILGWINDWAIRE-Ilg Electric Ventilating Co
ILLIMI-HY-CAP-Illinois Condenser Co
Illinois Condenser Co 1616 N Throop St Chicago 22 Ill
Illinois Edison Porcelain McGraw-Edison Co 510 N Pearl St Macomb Ill
Illinois Electric Porcelain Co-see Illinois Edison Porcelain
Illinois Malleable Iron Co-see Appleton Electric Co
Illinois Testing Laboratories Inc 420 N LaSalle St Chicago 10 Ill
Illuminating Engineering Co 2347 East Nine Mile Rd Hazel Park Mich
Illumitronic Engineering 680 East Taylor Ave Sunnyvale Calif
Isco Corp 4730 Madison Rd Cincinnati 27 Ohio
Isco Copper Tube & Products Inc-see Isco Corp
IMCOR-Insulation Mfrs Corp
IMMERSATHERM-Mercold Corp
IMPACTOOL-Ingersoll-Rand Co
IMPERIAL-Miller Co
Imperial Lighting Products Co-see Emerson-Imperial Lighting Co
IMPERIALITE-Emerson-Imperial Lighting Co
IMPERVEX-Crescent Insulated Wire & Cable Co
IMPERVOIL-Crescent Insulated Wire & Cable Co
IMPROV-A-LITE-General Electric Co
IN-BILT-Holubane Co Inc
IN-BUILT-Nutone Inc
INCA-Phelps Dodge Copper Products Corp
INCA-LIGHTS-Wilson (J A) Lighting & Display Inc
INCELOID-American Products Mfg Co Inc
INCH-MARKED-Republic Steel Corp
INDECO-Industrial Engineering & Equipment Co Inc
Independent Pneumatic Tool Co-see Thor Power Tool Co
Independent Products Co-see Independent Protection Co Inc
Independent Protection Co Inc 1605-07 S Main St Goshen Ind
Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY
Induction Motors Corp 570 Main St Westbury New York
INDUCTROL-General Electric Co
INDUCTRONIC-Weston Instruments
INDUCTUNER-Mallory (P R) & Co Inc
Industrial Automation Corp 2415 W Montrose Ave Chicago Ill
Industrial Control Panel Co-see Control Panel Corp
Industrial Development Labs Inc 982 River Rd Edgewater NJ
Industrial Devices Inc Edgewater 19 NJ
Industrial Electric & Mfg Co-see Heatube Dept
Industrial Electrical Works Inc 1509 Chicago St Omaha 2 Neb
Industrial Engineering & Equipment Co Inc 24 Hanley Industrial Ct St Louis 17 Mo
Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY
Industrial Instrument Co-see Seely Instrument Co Inc
Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ
Industrial Lamp Corp 14th & Blaine Sts Elkhart Ind
Industrial Plastic Fabricators Inc Endicott St Norwood Mass

Industrial Plastic Fittings Co 3891 W 150 St Cleveland 11 Ohio
Industrial Tape Corp-see Permacel-Lepages Inc
Industrial Transformer Corp Gouldsboro Pa
INDUSTRIALIST-Duro-Test Corp
INDUSTRIALINE-Cam-Lok Div Empire Products Inc
Industrialine Inc-see Cam-Lok Div Empire Products Inc
INERTAIRE-Westinghouse Electric Corp
INERTEEN-Westinghouse Electric Corp
INFINILITE-Integrated Ceilings Inc
INFRA-FLOW-Electro-Products Mfg Co
Ingersoll-Rand Co 11 Broadway NY 4 NY
INHIBISOL-Penetone Co
INKIE-Cord-Lite Corp
Inland Ladder Co 1914 Stanford St Alameda Calif
INMANCO-Insulation Mfrs Corp
INNER-SPRINGS-Urell Inc
INSECTO-Solar Electric Corp
INSTA-START-France Mfg Co
Instrument Laboratories 315 W Walton Pl Chicago 10 Ill
Integrated Ceilings Inc 11766 W Pico Blvd Los Angeles 64 Calif
INTERMATIC-International Register Co
International Telephone & Telegraph Corp Industrial Products Div 15191 Bledsoe St San Fernando Calif
IONAIRE-Wesix Electric Heater Co
Iron Fireman Electronics Div-see Signet Controls
IRONCLAD-Exide Industrial Div
IR A-LUTE-Sauerssen Cements Co
IRSAHOL-Westinghouse Electric Corp
IR SOLSEAL-Ansconda Wire & Cable Co
I ST-O-VERSE-Franklin Electric Co Inc
INSTANT HEAT-Emerson-Pryme Co
INSTANT HEAT-Wall (P) Mfg Co
Insto-Gas Corp 998 E Woodbridge St Detroit 7 Mich
INSTO-HOT-Insto-Gas Corp
INSTROF-Cope (T J) Div Rome Cable Corp
Insul-B Corp 1369 Industrial Rd San Carlos Calif
INSUL-LOCK-Anthony (F M) Co
INSUL-PIN-Graham Mfg Co
INSUL-JAG-Quigley Co Inc
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill
INSULINER-Thomas & Betts Co
INSULINK-Burndy Corp
INSULUG-Burndy Corp
INTENSO-Appleton Electric Co
INTER-LINK-Cable Electric Products Inc
INTERFERENCE FREE-Gold Cathode Lighting Corp
INTERLOCK-Hubbell (Harvey) Inc
International Business Machines Corp Times Equipment Div 590 Madison Ave New York 22 NY
International Crossarm Co Inc-see Haley (R G) & Co Inc
International Electric Fence Co Inc Box 650 Albert Lea Miss
International Electric Industries Inc-see Beckley Electric Co Inc
International Ferment Machinery Co Inc Ramapo N.Y.
International Lighting Mfg Co 1825 N 19 St St Louis 6 Mo
International Metal Hose Co Ashford Ave Bellevue Ohio
International Oil Burner Co 3800 Park Ave St Louis 10 Mo
International Paper Co Wood Preserving Div Kansas City 6 Mo
International Register Co 2620 W Washington Blvd Chicago 12 Ill
International Seal & Knot Protector Co 58-02 37th Ave Woodside 77 NY
International Trailer Co Inc 725 North Point Rd Baltimore 6 Md
Interstate Drop Forge Co Special Products Div 4051 N 27 St Milwaukee 16 Wis
Interstate Rubber Products Corp 908 Avila St Los Angeles 12 Calif
INTERZONE-Rockbestos Products Corp
INTRA-TEL-General Electric Co
INVERTOLITE-Adjustable Fixture Co
Invincible Vacuum Cleaner Mfg Co Dover Ohio
Iona Ventilator Co Inc 2821-29 W Dauphin St Philadelphia 22 Pa
IONOSTAT-United States Radium Corp
IRON MIKE-Arco Mfg Co
IRONCLAD-Exide Industrial Div Electric Storage Battery Co
IRRATHERNE-General Electric Co
Irrigation Varnish & Insulator Co-see Minnesota Mining & Mfg Co
Irwin Auger Bit Co 92 Grant St Wilmington Ohio
Isert (John H) Co-see Queen Products Co Inc
ISO-Isolantite Mfg Corp
ISO GLAS-Natvar Corp
ISO-PLANE-Motorola Communications & Electronics Inc
ISOBESTOS-Natvar Corp
ISOFORCE-General Control Co
Isolantite Mfg Corp Stirling NJ
ISOLASTANE-Natvar Corp
ISOLITE-United States Radium Corp
IVANHOE-Miller Co
IVCO-Iona Ventilator Co Inc
IVORY-X-Pass & Seymour Inc

J
J-LINE-Lint (Clyde W)
Jack & Heintz Inc 17600 Broadway Cleveland 1 Ohio

JACK RABBIT-Hubbell (Harvey) Inc
JACK STACKER-Lewis-Shepard Products Inc
JACKLIFT-Lewis-Shepard Products Inc
JACKSON-Vulcan Electric Co
Jackson Electrical Co 900 W Van Buren St Chicago 7 Ill
Jackson Electrical Instrument Co 18 S Patterson Blvd Dayton 2 Ohio
JAGABI-Biddle (James G) Co
Janette Electric Mfg Co LeHigh at Main Sts Morton Grove Ill
JAQJET-Sticht (Herman H) Co Inc
Javex P O Box 646 Redlands Calif
Jay Lighting Mfg Co Inc 23-29 Quincy St Brooklyn 38 NY
JAYCANDESCENT-Jay Lighting Mfg Co Inc
JEEP-Mercury Mfg Co
Jefferson Electric Co 25th & Madison Bellwood Ill
Jeffrey Mfg Co 832 N 4 St Columbus 16 Ohio
Jeffries Transformer Co 610 Turner St Los Angeles 12 Calif
Jenkins Bros Rubber Div 100 Park Ave New York 17 NY
Jensen Inc 9331 Freeland Ave Detroit 28 Mich
Jensen Specialties Inc-see Jensen Inc
Jerrod Electronics Corp 23rd & Chestnut Sts Philadelphia 3 Pa
JET FLUX-All-State Welding Alloys Co Inc
Jet Line Gun Co 730 Seige Ave Charlotte NC
JET-STREAM-Signal Electric Div King-Seely Corp
Jeta Metal Fabricators Inc Yonkers NY
JETSTREAM-Kent Co
JEWEL-Dependable-Electric Mfg Co Inc
JIFFY-Eagle Electric Mfg Co Inc
JIFFY-Lint (Clyde W)
JIFFY-Minerallic Electric Co
Jo-Bell Products Inc 5456 W 111 St Oak Lawn Ill
JOB-SITE-International Trailer Co Inc
JOBMASTER-Ramset Fastening System
Johns-Manville 22 E 40 St New York 16 NY
Johnson Bronze Co 490 S Mill St New Castle Pa
Johnson Mfg Co Inc 600 Anamosa Rd Mt Vernon Iowa
Johnston Foil Mfg Co 6106 S Broadway St Louis 11 Mo
JOINTED-ARM-Woodward Machine Co
JOMANCO-Johns-Manville
Jones Motrola Corp 432 Fairfield Ave Stamford Conn
Jordan Co 51st & Merrimac Ave Chicago 38 Ill
Jordan Electric Products Div Electric Storage Battery Co 222-228 N 2nd St Minneapolis 1 Minn
Jordan Electric Mfg Co-see Jordan Electric Products Div
Jordan Electronic Mfg Co Inc-see Jordan Electronics
Jordan Electronics 3025 W Mission Rd Alhambra Calif
Jostyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill
Joy Mfg Co H W Oliver Bldg Pittsburgh 22 Pa
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo
JUMBO PLATE-Sierra Electric Corp
JUTE PLUG-Arro Expansion Bolt Co

K

K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa
K & B-Kirk & Blum Mfg Co
K & H-Krueger & Hudepohl Inc
K M-Keesbey & Mattison Co
K-R-Kruse-Riecke
K-RAY-XH-Cond-Lite Corp
K-S-V-Arex Co
KVT-Neo-Ray Products Inc
KA-LUG-Burndy Corp
Kaiser Aluminum & Chemical Sales Inc 1924 Broadway Oakland Calif
Kalb Fell Laboratories Inc-see Kin Tel
Kalan Electric Co Inc 146 Mott St Oceanside L I NY
KANTARK-Trico Fuse Mfg Co
KARAK-Olio Carbon Co
KARBATE-National Carbon Co
KARRI-GO-Silent Hoist & Crane Co
KATHANODE-Gould-National Batteries Inc
Kato Engineering Co 1442 First Ave Mankato Minn
Katolight Corp First Ave at Chestnut (P O Box 891) Mankato Minn
Kaman Air Conditioning Co 4336 W Pine Blvd St Louis Mo
Kawner Co Niles Mich
KAY-BEE-K-B Lighting Mfg Co
Kay Electric Co Maple Ave Pine Brook N J
KAY LAB-Kin Tel
Kayline Co 2480 E 22 St Cleveland 15 Ohio
KAYWOR-Scranton Storage Battery Corp
KEARNALEX-Kearney (James R) Corp
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo
Keesbey & Mattison Co Butler Ave Ambler Pa
KECO-Kuhlman Electric Co
Kedman Co 233 S Fifth West St Salt Lake City Utah
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb
KEIL-Trine Mfg Corp
Keil (Francis) & Sons Inc-see Trine Mfg Corp
KEL-TEL-Kellogg Switchboard and Supply Co
KELCO-Kneisley Electric Co
Kellams Co Inc 15 Williams St Stonington Conn
Kellams Products Co-see Kellams Co Inc
Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill

Kelly Specialty Co 5958-ou Washington Blvd Chicago 44 III
 KEN-AIRE—Argo Products Co
 KEN-RAD—Westinghouse Electric Corp Lamp Div
 Kenbert-Arpag Co 520 Barretto St Bronx 59 NY
 Kendall Co—see Polyken Sales Div Kendall Co
 Kennecott Wire and Cable Co Phillipsdale (Rumford 16) R I
 Kent Co Inc 359 Canal St Rome NY
 Kent Lighting Corp 500 Union Ave Brooklyn 37 NY
 Kent Metal Mfg Co Inc—see Kent Lighting Corp
 KENTLITE—Kent Lighting Corp
 Kester Solder Co 4201 Wrightwood Ave Chicago 39 Illinois
 Kett Appliance Co—see Kett Tool Co
 Kett Tool Co 5055 Madison Rd Cincinnati 27 Ohio
 Key-Hak Corp—see Producers & Distributors Inc
 Key-Hak Products Co—see Producers & Distributors Inc
 Keyes-Davis Co 74 14th St Battle Creek Mich
 KEYNOTE—Edwards Co Inc
 KEYSTONE—Diamond Expansion Bolt Co Inc
 KEYSTONE—Fullman Mfg Co
 KEYSTONE—Okonite Co
 Keystone Carbon Co Inc 1935 State St St Marys Pa
 Keystone Electric Mfg Co 2228 E Tioga St Phila 34 Pennsylvania
 Keystone Mfg Co 7328 Sherwood Rd Warren Mich
 Kichler (G. D.) Co 2101 Superior Ave Cleveland 14 Ohio
 Kickhafer Mfg Co 901 S Second St Milwaukee 4 Wis
 Kidde Ultrasonic & Detection Alarms Inc 459 Brighton Rd Allwood Station Clifton NJ
 Kilbury Mfg Co Inc 14529 Hawthorne Blvd Lawndale Calif
 Kilark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo
 KILOTRON—Electric Arc Inc
 Kimble Glass Co P O Box 1035 Toledo 1 Ohio
 Kin Tel 5725 Kearney Villa Rd San Diego 12 Calif
 Kindorf Co—see Steel City Electric Co
 KING—Patrick & Wilkins Co
 King Mfg Corp 3146 N Chicago Ave Chicago 22 Ill
 King Refrigerator Corp 76-02 Woodhaven Blvd Glendale 27 NY
 Kingston Conley Inc North Plainfield NJ
 Kingston Conley Electric Co—see Kingston Conley Inc
 Kinney Electrical Mfg Co 678 Buckeye St Elgin Ill
 Kiral Inc Box 4594 R F D 1 Kingston NY
 Kirk & Blum Mfg Co 3120 Forrer St Cincinnati 9 Ohio
 KIRK-KEY—I-T-E Circuit Breaker Co
 Kirkland (H R) Co 8 King St Morristown NJ
 Kirkwood Carbon Corp 4857 W 130 St Cleveland 35 Ohio
 Kirkwood Commutator Corp 4855 W 130 St Cleveland 35 Ohio
 Kirrin Co 3435 E Jefferson Ave Detroit 7 Mich
 Kisco Co Inc 2414 De Kalb St St Louis 4 Mo
 KITCHEN-AIRE—Stewart Industries Inc
 KLAMPUSWITCH FUZ—Adam (Frank) Electric Co
 KLEEN ARC—Becker Bros Carbon Co
 KLEEN KUT—Superior Insulating Tape Co
 KLEEN-SEAL—Anderson Electric Corp
 Klein (Leo) Electronics 2404 S LaBrea Ave Los Angeles 16 Calif
 KLEIN-KORD—Klein (Mathias) & Sons
 KLEIN-LINE—Klein (Mathias) & Sons
 KLEIN-LOK—Klein (Mathias) & Sons
 Klein (Mathias) & Sons 7200 McCormick Rd Chicago 45 Ill
 Kliegl Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY
 Klieglite—Kliegl Bros
 Klieglite Mfg Co 316 Delancy St Phila 6 Pa
 KLIKSWITCH—General Control Co
 Kline Savidge Co Inc 163 N Third St Phila 6 Pa
 KLIP-BEAM—Cable Electric Products Inc
 KLIP-BILT—Frick-Gallagher Mfg Co
 KLIPLOK—Trico Fuse Mfg Co
 KLIPITITE—Kulika Electric Corp
 KLIXON—Metals & Controls Div
 KLONDIKE—Perfektite Co
 KLOZ-A-LITE—Slater Electric & Mfg Co Inc
 Knapp-Monarch Co Bent & Potomac St Louis 16 Mo
 Kneisley Electric Co 2501-2509 Lagrange St Toledo 3 Ohio
 KNI-TRON—Kneisley Electric Co
 KNOCK-OUT—Lee (KO) Co
 Knopp Inc 1307 66th St Oakland 8 Calif
 Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn
 Koch (Paul W) & Co—see Lint (Clyde W)
 Koch & Lowy Mfg Co 201 E 34 St New York 16 NY
 KODAIRE—Sperli Faraday Inc
 Kohler Mfg Co 395 Lincoln St Marlboro Mass
 Kohler Co Kohler Wis
 Koiled Kords Inc Box K Hamden Conn
 KOLDBOND—Columbia Electric & Mfg Co
 KOLOR KODED—Guth (Edwin F) Co
 Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ
 Kondu Corp 1040 W 12 St Erie Pa
 KONKRETE KORE—Tilden Tool Mfg Co
 KOOL-SEL—Pyramid Electric Co
 KOOLER-AIRE—United States Air Conditioning Corp
 Kopex Div Gemmer Mfg Co 6400 Mt Elliott Ave Detroit Mich

Koppers Co Inc Wood Preserving Div 750 Koppers Bldg Pittsburgh 19 Pa
 Kord (Leonard E) Co P O Box 55424 Indianapolis 5 Ind
 Kord Mfg Co Inc 4510 White Plains Rd New York 70 NY
 KORDUCT—Johns-Manville
 KORKER—U S Expansion Bolt Co
 KORKER KING—RCS Tool Corp
 Korns (C) Co P O Box 485 Johnstown Pa
 KOTE-LITE—Woodward Machine Co
 Krauter & Co Inc 585 18th Ave Newark 3 NJ
 KRALASTIC—United States Rubber Co
 KRANE KAR—Silent Hoist & Crane Co
 KROMOVER—All-State Welding Alloys Co Inc
 Krueger & Hudepohl Inc 1041 Evans St Cincinnati 4 Ohio
 Kruse-Rieke Auburn Ind
 Kuhlman Electric Co P O Box 288 Birmingham Mich
 Kulika Electric Corp 633 S Fulton Ave Mount Vernon NY
 Kurman Electric Co 191-193 Newel St Brooklyn 22 NY
 KURMELEC—Kurman Electric Co
 KURTZ (Morris) Inc 1420 S Talman Ave Chicago 8 Ill
 Kurz & Root Co Inc—see Kurz & Root Sales & Engineering Corp
 Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis
 KWIK—Dunton (MW) Co
 KWIK BAR—Kruse-Rieke
 KWIK CHANGE—Leviton Mfg Co Inc
 KWIK-KALL—Loge (J M) Sound Engineers
 Kwikheat Mfg Co 3732 San Fernando Rd Glendale 4 Calif
 KWIXTURE—Project Fixture Mfg Corp
 KYLON—Mystik Adhesive Products Inc
 Kyova Fibre Pipe Co Ironton Ohio

L

L-BLOW—Trade-Wind Motorfans Inc
 L-M—Line Materials Industries
 L & P—Light & Power Utilities Corp
 L P L—Lighting Products Inc
 LS-FLOOD—Radiant Lamp Co
 LAB-HEAT—Blue M Electric Co
 Labelon Tape Co Inc 450 Atlantic Ave Rochester 9 NY
 LABSTROBE—Berkshire Laboratories
 LACKON—United States Radiator Corp
 Laclede Steel Co Arcade Bldg St Louis 1 Mo
 LADDER LINE—Illumitronic Engineering
 Ladbury Co Inc Boston Post Rd (P O Box 88) Branford Conn
 LAG SHIELDS—Rawlplug Co Inc
 Laganke Electric Co—see Lake Shore Electric Corp
 LAKE—National Time & Signal Corp
 Lake Erie Electric Mfg Inc 2952 W 22 St Erie Pa
 Lake Mfg Co 2323 Chestnut St Oakland Calif
 Lake Shore Electric Inc—see Lake Shore Electric Corp
 Lake Shore Electric Corp 205 Willis St Bedford Ohio
 Lake Shore Electric Mfg Co—see Lake Shore Electric Corp
 LAKIN—Thomas & Betts Co
 Laminated Plastics Inc—see Glastic Corp
 LAMP SNATCHER—Rich (Phil) Fan Mfg Co Inc
 Lampco Lighting Fixture Co—Hasco Electric Corp
 Lampighter Products Co Inc—see Lightalams Inc
 Lancaster Glass Corp Lancaster Ohio
 Lancaster Lens Co—see Lancaster Glass Corp
 LANCE MARKER—Keyes-Davis Co
 Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill
 Lantz Mfg Co Inc Valparaiso Ind
 Lapp Insulator Co Inc 35 Gilbert St Leroy NY
 LAQUA—Fidelity Chemical Products Corp
 LaRaus Mfg Co Inc LeRoy NY
 Larco Inc Route 20 East Painesville Ohio
 Larkin Lectro Products Co—see Central Transformer Corp
 LaRose (WT) & Associates Inc 31 Ontario St Cohoes NY
 Larson Instrument Co 24 Orchard St Tarrytown NY
 LaSalle Products Inc—see Market Electric Products Inc
 LAST WORD—Starrett (L S) Co
 Lastik Paint Inc 201 Iroquois Bldg Pittsburgh 13 Pa
 Lastik Products Co Inc—see Lastik Paint Co
 Lau Blower Co 2001 Home Ave Dayton 7 Ohio
 LAVOLAIN—Star Porcelain Co
 LAWCO—Velocity Power Tool Co
 LAY-CIT—Kearney (James R) Corp
 LAY-IN—Square D Co
 LAYTEX—Kaiser Aluminum & Chemical Sales Inc
 LATROBE—Fullman Mfg Co
 LE CARBONE—Carbone Corp
 LEADER—Keyes-Davis Co
 Leader Lamp Mfg Co 476 Broome St NY 13 NY
 LEAF-LITE LUMINUS—Luminous Ceilings Inc
 LEAF-PRUF—Alpha Metals Inc
 LECTERN—Lodge (J M) Sound Engineers
 LECTERN-LYRIC—AOW Corp
 Lectrohm Inc 5560 Northwest Highway Chicago 30 Ill
 ELECTRONIC SENTRY—Joy Mfg Co
 LEDEX—Leland (GH) Inc
 LEDLOK—U S Expansion Bolt Co
 Lee-Bert Inc 900 Lapeer St Saginaw Mich

Lee (Walter) Chemical Corp 1383 Seabury Ave Bronx 61 NY
 Lee Electric Inc 566 52nd St West New York New Jersey
 Leebow Mfg Co 65 Wayne Ave Youngstown 2 Ohio
 Leeco-Neville Co 1374 E 51 St Cleveland 3 Ohio
 Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa
 LEEFLUOR—Lee (Walter) Chemical Corp
 LEESONA—Universal Winding Co
 Lehigh Fan & Blower Co—see Lehigh Fan & Blower Div
 Lehigh Fan & Blower Div Fuller Co Catesaugua Pa
 Leibfried (C H) Mfg Corp 95-101 Guernsey St Brooklyn 22 NY
 Leigh Building Products Coopersville Mich
 Leitch Engineering Corp—see Leitch-Huard Corp
 Leitch-Huard Corp Stark & Commercial Sts Manchester NH
 LEKOLITE—Century Lighting Inc
 LEKTRO-LOK—Linemaster Switch Corp
 Leland (G H) Inc 123 Webster St Dayton 2 Ohio
 Lenco Electric Co 1501 Webster St Dayton 1 Ohio
 Lenco Inc 350 W Adams St Jackson Mo
 Lenk Mfg Co Franklin Ky
 LENOX—Day-Brite Lighting Inc
 LENS DRUM—Art Metal Co
 LESTERLITE—Transolite Corp
 LeTourneau (RG) Inc 2399 S MacArthur Longview Tex
 LEV-O-LET—Leviton Mfg Co Inc
 LEV-O-LITE—Leviton Mfg Co Inc
 LEV-O-LOCK—Leviton Mfg Co Inc
 LEVEL MASTER—Jo-Bell Products Inc
 Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY
 LEVOLIER—McGill Mfg Co Inc
 Lew Electric Fittings Co 627 W Lake St Chicago 6 Ill
 Lewis Engineering Co 52 Rubber Ave Naugatuck Conn
 Lewis-Shepard Products Inc 125 Walnut St Watertown Mass
 Lewus Electric Co 1254 W Harrison St Chicago 7 Ill
 LEXINGTON—Miller Co
 Liberty Bell Mfg Co Inc Swainsboro Ga
 Licon Switch & Control Div Illinois Tool Works 2501 N Keeler Ave Chicago 39 Ill
 Lidsen (Gustav) Inc—see Lidsen of North Carolina Inc
 Lidsen of North Carolina Inc 1000 First St Hayesville NC
 LIFE GUARD—Dorsey (John E) Co
 LIFE GUARD—Westinghouse Electric Corp Lamp Div
 LIFE-LINE—Westinghouse Electric Corp Lamp Div
 LIFE-TIME—Billings & Spencer Co
 LIFE-TIME—Slater Electric & Mfg Co Inc
 Lifetime Industries—see Lighting Products Inc
 LIFETIME LIGHTING—Dynasol Lighting Corp
 LIFE STACKER—Allied Mfg & Sales Co
 Lift Trucks Inc 2425 Spring Grove Ave Cincinnati 14 Ohio
 LIFTRUK—Silent Hoist & Crane Co
 Light & Power Utilities Corp 1035 Firestone Blvd Memphis 7 Tenn
 LIGHT WATCHMAN—Ripley Co Inc
 Lightalams Inc 95 Atlantic Ave Brooklyn 1 NY
 LIGHT LITE—Cable Electric Products Inc
 LIGHTGUARD—Exide Industrial Div
 Lighting Dynamics Inc 802 W Whittier Blvd Whittier Calif
 Lighting Products Inc 1549 Park Ave West Highland Park Ill
 Lightmore Appliance Corp 651-5 Driggs Ave Brooklyn 11 NY
 LIGHTNING—Vaco Products Co
 LIGHTNING LIFT—Atlas Overhead Door Co
 Lightning Protection Engineers—see Security Mfg & Contracting Co
 Lightolier Inc 346 Claremont Ave Jersey City 5 NJ
 LIGHTTRON—Condi-Lite Corp
 LIGHTSCAPER—Magni Flood Inc
 LIGHTSCAPER—Shalda Mfg Co Inc
 LIGHTWARDEN—Electric Cord Co
 LIGHTWHEEL—Silvray Lighting Inc
 Lima Electric Motor Co Inc Findlay Road Lima Ohio
 LIMB-LOPPER—Miller-Robinson Co
 LIMITAMP—General Electric Co
 LIMITRON—Bussmann Mfg Div McGraw-Edison Co
 LINABESTOS—Keesbey & Mattison Co
 LINC-THAW—Lincoln Electric Co
 LINCOLN—Forston Co
 LINCOLN—Sangamo Electric Co
 Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio
 LINCOLNDUCTOR—Lincoln Electric Co
 LINCOLNTROL—Lincoln Electric Co
 LINCOLNTROL—Sangamo Electric Co
 LINCOLNWELD—Lincoln Electric Co
 LINCWELDER—Lincoln Electric Co
 Lindberg Engineering Co 2450 W Hubbard St Chicago 12 Ill
 Linde Air Products—see Union Carbide Corp
 Lindell Electric Control Corp 384 Canal St New York 13 NY
 LINE-A-MATIC—Stromberg Time Corp
 LINE-A-SPEDE—Allis (Louis) Co
 LINE-ARC—Electric Controller & Mfg Co
 Line Electric Co 271 South Sixth St Newark 3 New Jersey
 LINE GUARD—Preformed Line Products Co

Line Material Co.—see Line Material Industries
 Line Material Industries—McGraw-Edison Co 700 W
 Michigan St Milwaukee Wis
 LINE-O-HEAT—Smith-Gates Corp
 LINE-O-LAMPS—Wiremold Co
 LINE-O-METER—Simpson Electric Co
 Linemaster Switch Corp Woodstock Conn
 Link-Belt Co—Potential Plaza Chicago 1 III
 LINKITT—Burdoy Corp
 LINOLITE—Frank Corp
 Lint (Clyde W) 2323 W 18 St Chicago 8 III
 Linton (Horace) Div Hess Goldsmith & Co Inc 1400
 Broadway New York 18 NY
 LIQUATITE—Electri-Flex Co
 LIQUID-ICE—Cool-ette Inc
 LIQUID TITE—Electrical Fittings Corp
 LITE BLOX—Guth (Edwin F) Co
 LITE-LINER—House-O-Lite Corp
 LITE MITE—Stocker & Yale Inc
 LITE-N-TUFF—Hamilton Caster & Mfg Co
 LITE-UR-WAY—Edco International Corp
 Litecontrol Corp 36 Pleasant St Watertown 72
 Massachusetts
 Litecraft Mfg Corp 100 Dayton Ave Passaic NJ
 LITEKRAFT—Cole (C W) & Co Inc
 LITEMASTER—Art Specialty Co
 LITEMASTER—Flexo International Corp
 LITEMASTER—Globe Lighting Products Inc
 Lintern Corp—see Larco Inc
 Lithonia Lighting Products Co Box 206 Conyers Ga
 Littlefuse Inc 1865 Miner St Des Plaines III
 LITTLE CHAMP—Champion DeArment Tool Co
 LITTLE DEVIL—Ohmite Mfg Co
 LITTLE GIANT—Lenk Mfg Co
 LITTLE INCH—Alko Mfg Co
 LITTLE MAJOR—Arro Expansion Bolt Co
 LITTLE-SIX—Burgess Battery Co
 LITTLE WIZARD—Rosen (David) & Son Inc
 Littleford Bros Inc 453 E Pearl St Cincinnati 2
 Ohio
 Lloyd Johnson Co—see Johnson Mfg Co Inc
 LLOYDS—Johnson Mfg Co Inc
 LO-CARB—Capewell Mfg Co
 LO-NOIZ-LEVEL—Allen Cooler & Ventilator Inc
 LO-BRITE—E-S & E Corp
 LO-MED—American Engineering Co
 LO-VOLT—Industrial Devices Inc
 LO-X—Buildog Electric Products Div
 LOAD-LIFT—American Pulley Co
 LOAD-MOBILE—American Pulley Co
 LOAD SENTRY—Assembly Products Inc
 LOADBUSTER—S & E Corp
 LOADGUARD—R T & E Corp
 LOADSTAR—Fidelity Electric Co Inc
 LOADSTAR—Leland Electric Co
 LOBOY—Holophane Co Inc
 LOCALITE—Fostoria Pressed Steel Corp
 LOCKLITE—Westinghouse Electric Corp Lighting Div
 LOCK-TITE—Thomas & Betts Co
 LOCKTITE—American Sealants Co
 LODESTAR—Chisholm-Moore Hoist Div
 Loge (J M) Sound Engineers 2171 W Washington
 Blvd Los Angeles 18 Calif
 LOK-A-BLOK—Isco Corp
 LOK-IT—Holub Industries Inc
 LOK-ON—Holub Industries Inc
 LOKATOR—Holtz Co Inc
 LOKFAST—Stebor Mfg Co
 LOKTITE—U S Expansion Bolt Co
 LONDON CHEMICAL CO INC 1535 N 31 Ave Mel-
 rose Park III
 Long-Bell Lumber Co—see International Paper Co
 LONG LIFE—Goodall Rubber Co
 LONG LIFE—McGraw-Edison Co
 LONGRIP—Ridge Tool Co
 LOVO-O-LITE—Guth (Edwin F) Co
 Lord-Taber Co Inc—see Castle Engineering Co
 LORRAINE—Carbone Corp
 LOTEMP—Mico Instrument Co
 LOUVE-ROCKET—Sun-Lite Mfg Co
 LOUVERAY—Duro-Test Corp
 LOUVRON—Lightolier Inc
 LOVEX—Day-Brite Lighting Inc
 LOVOLT—Woodhead (Daniel) Co
 LOVR-LUMINUS—Luminous Ceilings Inc
 Lowsted (CM) & Co Inc 4000 W Marginal Way Se-
 attle 6 Wash
 LOW-PEAK—Bussmann Mfg Div McGraw-Edison Co
 Lowell Insulated Wire Corp P O Box 260 Pawtucket
 RI
 Lowell Insulated Wire Div—see Lowell Insulated Wire
 Corp
 LOXARMOR—Okonite Co
 LOXIN—Star Expansion
 LOXON—McGill Mfg Co Inc
 LUBO-JET—Trico Fuse Mfg Co
 LUCETTE—Versen (Kurt) Co
 Lucifer Furnaces Inc Neshaminy Pa
 LUCO—Lukens (Thos F) Metal Co
 Ludlow Mfg & Sales Co P O Box 101 Needham
 Heights 94 Mass
 Lug-All Co—see Handy Angle Div Lug-All Co
 LUG-IT—Thomas & Betts Co
 Lukens (Thos F) Metal Co Hedley & Bath Sts Phila-
 delphia 37 Pa
 LUMA-CEILING—Pittsburgh Reflector Co
 Luma Electric Equipment Co 1607 Colning Drive
 (P O Box 132) Toledo Ohio
 LUMATROL—Micro Balancing Inc
 LUMEN-AREA—Electro Lighting Corp
 LUMENITE—Collyer Insulated Wire Co

Luminate Electric Corp 407 S Dearborn St Chicago
 5 III
 LUMI-PEND—Silvray Lighting Inc
 LUMI-POST—Silvray Lighting Inc
 LUMI-TONE—Poliak Luminescent Corp
 LUMIGRID—Solar Light Mfg Co
 Luminous Ceilings Inc 3701 N Ravenswood Ave Chi-
 cago 13 III
 LUMIRAMA—Litecraft Mfg Co
 LUMO—Appleton Electric Co
 LUNAR—Versen (Kurt) Co
 LUNDY—Specialties Inc
 LUNGEN—Edwards Co Inc
 LUSTERLAC—American Electric Cable Co
 LUV-R-LOK—Lighting Products Inc
 LUVIE TILE—Wilson (J A) Lighting & Display Inc
 LUX-GRILL—House-O-Lite Corp
 LUXAIRE—Pfaff & Kendall
 Luxor Lighting Products Inc 350 5th Ave NY 1 NY
 LUXTROL—Superior Electric Co
 LUXWOOD—Moe Light Div Thomas Industries Inc
 LYNN—Vaco Products Co
 Lyon Rural Electric Co 2075 Moore St San Diego
 12 Calif
 LYTECASTER—Lightolier Inc
 LYTELITE—Lightolier Inc
 LYTESCAPE—Lightolier Inc
 LYTESPAN—Lightolier Inc

M

M-CAL—North Shore Nameplate Inc
 M-SCOPE—Fisher Research Laboratory Inc
 ME—Marathon Electric Mfg Corp
 M H Standard Co—see Versar Corp
 M S A SHOCKGARD—Mine Safety Appliances Co
 M & T—Metal & Thermit Corp
 M & T Welding Products Corp 703 37th Ave Oak-
 land Calif
 MTC—Flexonics Corp
 MTC—Marcus Transformer Co Inc
 M & W Electric Mfg Co Inc S Walnut St (P O Box
 87) East Palestine Ohio
 MACHETA—Asrovent Fan Co Inc
 Machinery Electrification Inc 56 Hudson St Northboro
 Mass
 Madison Equipment Co 5405 Detroit Ave Cleveland
 2 Ohio
 MAG-A-TROL—Ward Leonard Electric Co
 MAGIC ARM—Acme Lite Products Co
 MAGIC FRAME—Electro Lighting Corp
 MAGIC TOUCH—Roodie Mfg Co Inc
 MAGIC WAND—Sticht (Herman H) Co Inc
 MAGICLITE—Guth (Edwin F) Co
 MAGMOTOR—Carter Motor Co
 MAGNA—Ainsworth Lighting Inc
 MAGNA—Auto Arc-Weld Mfg Co
 MAGNA CHARGER—Fox Products Co
 MAGNA-LITE—Metalcraft Products Co Inc
 MAGNA-SET—Precision Thermometer & Instrument Co
 MAGNA WELDER—Auto Arc-Weld Mfg Co
 MAGNALAIRE—Westinghouse Electric Corp Lighting
 Div
 MAGNALITE—Light & Power Utilities Corp
 Magnatrol Inc P O Box 21 Kearny NJ
 MAGNAPULSE—Gemco Electric Co
 MAGNATORC—Hansen Mfg Co Inc
 MAGNATROL—Century Lighting Inc
 Magnatrol Valve Corp 67 Fifth Ave Hawthorne NJ
 Magnavox Co 2131 Beuter Rd Fort Wayne 4 Ind
 MAGNE-LOOP—Memco Engineering & Mfg Co Inc
 MAGNE TREATER—Radio Frequency Laboratories Inc
 MAGNEBRAKE—Vickers Inc
 MAGNECLUTCH—Vickers Inc
 Magnetnamic Corp P O Box H Youngstown 7 Ohio
 Magnetnamic Export & Development Corp—see Magne-
 thermic Corp
 Magnetics Inc Box EPG Butler Pa
 MAGNETRIP—Zinsco Electrical Products
 Magnetrol Inc 2110 S Marshall Blvd Chicago 23
 III
 MAGNETTE—Heinemann Electric Co
 Magni Flood Inc 50 Cray Ave Mt Vernon NY
 MAGNI-WHIRL—Blue M Electric Co
 MAGOHM—Electric Regulator Corp
 MAIN STREET—Westinghouse Electric Corp Light-
 ing Div
 MAINLINER—Westinghouse Electric Corp Lighting Div
 Majestic Metal S & S Co Inc 537 Sackett St Brook-
 lyn 17 NY
 MAJOR—Gem Electric Mfg Co Inc
 Major Equipment Co Inc 4603 W Fullerton Ave Chi-
 cago 39 III
 MAL-LEADS—Arro Expansion Bolt Co
 Mail Tool Co 25000 S Western Ave Park Forest III
 MAILDRILL—Mail Tool Co
 Mallory (P R) & Co Inc 30 S Gray St Indianapolis
 6 Ind
 WALLSAW—Mail Tool Co
 MANCHEX—Exide Industrial Div Electric Storage Bat-
 tery Co
 MANGRID—Driver (Wilbur B) Co
 MANHATTAN—Raybestos-Manhattan Inc
 Manning (RA) Associates—see Manning (RA) Co Inc
 Manning (RA) Co Inc 1810 North Ave Sheboygan
 Wis
 Manning, Maxwell & Moore Inc 250 E Main St
 Stratford Conn
 MANSON—Okonite Co
 MANULUX—Major Equipment Co Inc

Marathon Battery Co P O Box 298 Wausau Wis
 Marathon Electric Mfg Corp Wausau Wis
 Marathon Special Products Corp 12th & Cranberry
 Sts Erie Pa
 Marbelite Co Inc 179 N 10 St Brooklyn 11 NY
 Marble Card Electric Corp—Marble Electric Corp
 Marble Electric Corp Gladstone Mich
 MARCO—Marvin Electric Mfg Co
 MARCO—Progress Mfg Co Inc
 Marco Industries 207 S Helena St Anaheim Calif
 Marcus Transformer Co Inc Leesville Ave Railway
 NJ
 MARGLO—Marvin Electric Mfg Co
 Marion Electrical Instrument Co Grenier Field Man-
 chester NH
 Mark (Clayton) & Co 1900 Dempster St Evanston
 III
 MARK-TIME—Rhodes (M H) Inc
 MARKARRIER—Premax Products Div Chisholm-Ryder
 Co Inc
 Market Electric Products Inc 145 Seneca St Buffalo
 3 NY
 Markel (L Frank) & Sons Norristown Pa
 Market Forge Co 35 Garvey St Everett 49 Mass
 Market Forge Materials Handling Equipment—see Amer-
 ican Pulley Co
 Marks Mfg Co 700 N Carpenter St Chicago 22 III
 MARKSMAN—West Instrument Corp
 Markstone Mfg Co 1531 N Kingsbury Chicago 22 III
 ARLO—Sperli Faraday Inc
 Marlow Lights Inc Fanwood NJ
 Marquette Electric Switchboard Co 311 N Desplaines
 St Chicago 6 III
 MARR—Ratlam Mfg Co
 Marsh (Jas P) Corp 3501 Howard St Skokie III
 Marsh Heating Equipment Corp—see Marsh (Jas P)
 Corp
 Marsh Refrigeration Equipment Co—see Marsh (Jas P)
 Corp
 Marshall (John) Associates Inc Box 2463 Bridgeport
 8 Conn
 Martin (H P) & Sons 801 W 12 St P O Box 475
 Owensboro Ky
 Martin Fan & Blower Co 4634 W 21st Pl Chicago 50
 III
 Martindale Electric Co 1383 Hird Ave Cleveland 7
 Ohio
 MARTLITE—Ainsworth Lighting Inc
 MARVEL—Pulman Vacuum Cleaner Corp
 MARVEL—United Electric Motor Co
 Marvel Fluorescent Mfg Co—see Marvel Lamp Co
 Marvel Lamp Co 307 Newark St Hoboken NJ
 Marvel Rack Mfg Co Inc 24 N First St Minneapolis
 1 Minn
 Marvin Electric Mfg Co 648 Santa Fe Ave Los
 Angeles 21 Calif
 Marvin Mfg Co—see Marvin Electric Mfg Co
 Marvray Inc—see Seaboard Products Corp
 MASCO FONE—Simpson (Mark) Mfg Co Inc
 Mason (LE) Co 98 Business St (Hyde Park) Boston
 36 Mass
 Massey (A H) Inc 111 3rd St (P O Box 206) Derby
 Conn
 Massey-Ferguson Industrial Div Massey-Ferguson Inc
 1009 S West St Wichita 13 Kan
 MASTER—Kaiser Aluminum & Chemical Sales Inc
 Master Electric Div Reliance Electric & Engineering
 Co 126 Davis Ave Dayton 1 Ohio
 MASTER-LIGHT—Carpenter Mfg Co
 MASTER-PRO—Cincinnati Time Recorder Co
 MASTER-SIGN—Benjamin Electric Mfg Co
 MASTERBEAM—Miroflexor Co Inc
 Mastercraft Plastics Co Inc 95-01 150th St Jamaica
 35 NY
 MASTERGAUGE—Marsh (Jas P) Corp
 MASTERLINE—Blonder-Tongue Laboratories Inc
 Masterlite Mfg Co 2758 Kensington Ave Phila Pa
 MASTERPHONE—Kelllogg Switchboard and Supply Co
 MATCHLESS—Chisholm-Moore Hoist Div
 Matthews (W N) Corp—see Chance (A B) Co
 Matthews Electric Heater Mfg Co Albertville Ala
 Max-A-Loc Inc El Monte Calif
 MAX-FLO—Shaw-Perkins Mfg Co
 MAX-MIN—Weston Instruments
 MAXAW—Cummins Portable Tool Div John Oster Mfg
 Co
 Maxwell Equipment Co—see Emhart Mfg Co
 Maxmer Corp 1961 W 112 St Cleveland 2 Ohio
 McCabe-Powers Body Co 5900 N Broadway St Louis
 15 Mo
 McCaffrey Mfg & Supply Co 1840 W 14 St Chicago
 8 III
 MCCARTHY—Salem Tool Co
 McCarthy Electric Co 9640 Grinnell Detroit 13
 Mich
 McColpin-Christie Corp—see Christie Electric Corp
 McCorkle (D H) Co Box 97 Station A Berkeley Calif
 McDonald Mfg Co—see Sierra Electric Corp
 McDonnell & Miller Inc 3500 N Spaulding Ave
 Chicago 18 III
 McFarland (L D) Co McFarland Bldg Sandpoint
 Idaho
 McGill Mfg Co Inc Valparaiso Ind
 McK—McKinley (Ben P) Co
 McKee Div Thatcher Glass Mfg Co Inc Jeannette Pa
 McKee Glass Co—see McKee Div Thatcher Glass Mfg
 Co Inc
 McKinley (Ben P) Co 522 S Clinton St Chicago 7
 III
 McKinley-Mockenhaupt Co—see McKinley (Ben P) Co
 McLarty Systems 2600 Dickman Rd Battle Creek
 Mich

McLean Engineering Laboratories 70 Washington Rd (P O Box 228) Princeton NJ
McPhillips Mfg Co Inc 1329 Willoughby Ave Brooklyn 37 NY
Mechanical Industries Production Co 217-223 Ash St Akron 8 Ohio
Mechanical Products Inc 1824 River St Jackson Mich
Meco Metal Box & Panel Mfg Co Inc 2522 W Huntington St Philadelphia 32 Pa
MEDALIST—Marion Electric Instrument Co Ill
MEDALIST—York Div
MEGGER—Biddle (James G) Co
MEGOHM TEST—Davenport Mfg Co
MEGOHMER—Sticht (Herman H) Co Inc
Meier Electric and Machine Co Inc 3525 E Washington St Indianapolis 7 Ind
Meierjohan-Wengler 1102 W 9th St Cincinnati 3 Ohio
MELETRON—Barksdale Valves
MELOCALL—Edwards Co Inc
MELODY BELL—Cable Electric Products Inc
MELVIN—Sun-Lite Mfg Co
Memco Engineering & Mfg Co Inc Commack LI NY
MEMO-SCOPE—Hughes Products
MEMOTRON—Hughes Products
Mend-It Sleeve Mfg Co 3125 Gloria Terrace Lafayette Calif
Mephisto Tool Co Inc Box 16 Hudson NY
MERCHANDISER—Versen (Kurt) Co
MERCHANT—Miller Co
MERC—Corona Mfg Corp
MERCIO LITE—Great Northern Mfg Corp
Mercoird Corp—4201 W Belmont Ave Chicago 41 Illinois
MERCONTROL—Mercoird Corp
MERCURITE—Kenworth Co
MERCURY—General Control Co
MERCURY—Vulcan Electric Co
Mercury Hydraulics 1632-46 Wazee St Denver 2 Colo
Mercury Mfg Co 4700 W Division St Chicago Ill
Merwin Mfg Co 19th & German Sts Erie Pa
Metal & Thermic Corp Rahway NJ
Metalcraft Products Co Inc Mascher & Lippincott Sts Philadelphia 33 Pa
Metalcrafts Inc 677 Broadway NY 12 NY
METALEX—Willard Storage Battery Div Electric Storage Battery Co
METALZIPPER—Mid-States Welder Mfg Co
Metals & Controls Div Texas Instruments Inc 34 Forest St Attleboro Mass
METARAY—Wiegand (Edwin L) Co
METCO LIGHTING—Metalcraft Products Co Inc
METEOR—Associated American Winding Mach Inc
METEOR—Chisholm-Moore Hoist Div Columbus McKinnon Chain Corp
METEOR—Metalcraft Products Co Inc
METEOR—Wheeler Reflector Co
Meteor Electric Co Inc—see Leviton Mfg Co Inc
Meteor Mfg Corp Emporium Pa
Meter Devices Co 1001 Prospect Ave S W Canton 6 Ohio
METER-MATIC—International Register Co
METER-MATIC—Leitch-Huard Corp
Meters Inc 5353 N Keystone Ave Indianapolis 20 Ind
METL-CAN—Pyramid Electric Co
Metro Casting Co Inc 47 Grattan St Brooklyn 37 NY
Metron Instrument Co 432 Lincoln St Denver 3 Colo
METROPOLITAN—York Div
Metropolitan Device Co—see Murray Mfg Corp
Meyer Machine Inc Red Wing Minn
Mica Fabricating Co 53 Central Ave Rochelle Park NJ
MICA-GLAS—National Electric Coil Div
MICA MATT—National Electric Coil Div
Mica Products Mfg Co—see Mica Fabricating Co
Micacraft Products Inc 701-03 McGarret Highway Newark 5 NJ
MICALITE—Induction Heating Corp
MICEPACK—Electric Products Co
Michigan Fluorescent Light Div 393 Orchard Lake Ave Pontiac Mich
Michigan Oven Co 415 Brainard Detroit 1 Mich
Mico Instrument Co 80 Townbridge St Cambridge 38 Mass
MICRELAY—Ebert Electronics Corp
Micro Balancing Inc 191 Herricks Rd Garden City Pk NY
MICRO-HAT—MicroFlector Co Inc
MICRO-LITE—Burton Mfg Co
MICRO-MOTOR—Redmond Co Inc
MICRO-NAMIC—Micro Balancing Inc
Micro Switch Corp—see Micro Switch Div
Micro Switch Div of Minneapolis-Honeywell Regulator Co Chicago & Spring Freeport Ill
MICROFIN—Wiegand (Edwin L) Co
MICROFLO—General Control Co
MICROLITE—MicroFlector Co Inc
MICROLOY—Capewell Mfg Co
MICRONAIRE—Raytheon Mfg Co
MICROTESTER—Simpson Electric Co
MID-JET—Electro Devices Co Inc
MID-RIP—General Cable Corp
Mid-States Welder Mfg Co 6025 S Ashland Ave Chicago 36 Ill
Mid-West Chandler Co 15th & Gentry (P O Box 7365) North Kansas City 16 Mo
MIDGET—Swifler Co Inc
Midget Heater & Specialty Co 2801 Pacific Ave Tacoma 4 Wash

MIDGETESTER—Simpson Electric Co
Midland Paint & Varnish Co 3801 E 91st St Cleveland 5 Ohio
Midland Wire Corp see Parantite Wire & Cable Div
Essex Wire Corp
MIDLENE—Parantite Wire & Cable Div Essex Wire Corp
MIDPRENE—Parantite Wire & Cable Div Essex Wire Corp
Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill
Midwest Electric Products Inc 1515 N Front St Mankato Minn
Midwest Lighting Products Co P O Box 536 Edgewater Branch Cleveland 7 Ohio
MIGHTY MIDGET—Coffing Hoist Div
MIGHTY MITE—Stanley Electric Tools
MIGHTY MITE—Mechanical Industries Production Co
MIGHTY MITE—Remington Arms Co Inc
MIKROHM—Superior Electric Co
MIL-CARB—Wrought Washer Mfg Co
MIL-WROT—Wrought Washer Mfg Co
MILL-O-MATIC—Luxor Lighting Products Inc
Miller Co Illuminating Div 99 Center St Meriden Conn
Miller (Sanford) Co 11 Lynch St Brooklyn 11 NY
Miller Electric Mfg Co Inc 718 S Bounds St Appleton Wis
Miller Equipment Co Inc 13th & New Streets Franklin Pa
Miller Harris Instrument Co 601 E Ogden Ave Milwaukee 2 Wis
Miller-Robinson Co 7007 Avalon Blvd Los Angeles 3 Calif
Millerbernd Mfg Co Winsted Minn
Millers Falls Co 57 Wells St Greenfield Mass
MILLITE—Westinghouse Electric Corp Lighting Div
Mios System Devices—United States Petroleum Co
MILWAUKEE—Northern Light Co
Milwaukee Electric Tool Corp 5368 W State St Milwaukee 8 Wis
Milwaukee Parts Corp 607-15 S Sixth St Milwaukee 4 Wis
MILWAUKEE WROT—Wrought Washer Mfg Co
MIN-A-CLIPS—Mineralite Electric Co
MINALITE—Westinghouse Electric Corp Lamp Div
MINALITH—Koppers Co Inc Wood Preserving Div
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa
MINEON—Drake Mfg Co
Mineralac Electric Co 25 N Peoria St Chicago 7 Ill
Mines Equipment Co—see Joy Mfg Co Electrical Products Div
MINI BREAKER—Mechanical Products Inc
MINI-CELL—Neo-Ray Products Inc
MINI-GATOR—Mueller Electric Co
MINI-ISOLATOR—Javex
MINI-LAR—Russell & Stoll Co Inc
MINI-MARKER—Westline Products Div Western Lithograph Co
MINI-PLATES—Javex
MINI-SOCKET—Javex
MINI-VOLT—Industrial Devices Inc
MINICUBE—Fullerton Mfg Co
MINIRELAY—Ebert Electronics Corp
Minneapolis Electric & Construction Co 80 S 12 St Minneapolis 3 Minn
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 6 Minn
Minneapolis-Honeywell Regulator Co Boston Div 40 Life St Boston 35 Mass
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa
Minnesota Mining & Mfg Co Electrical Products Div 900 Bush Ave St Paul 6 Minn
Minnesota Mining & Mfg Co Irvington Div 6 Argyle Terrace Irvington 11 NJ
MINUTE MOUNT—Progress Mfg Co Inc
MIRAC-O-LITE—Cutler Light Mfg Co
MIRACLE—Okun (A L) Co Inc
MIRAC—Mitchell Rand Insulation Co
MicroFlector Co Inc 40 Bayview Ave Inwood LI New York
Mirror Co—see Aluminum Co of America
MIRRORSCOPE—Simpson Electric Co
Misener Mfg Co Inc 202-208 Walton St Syracuse 2 NY
Miskella Infra-Red Co E 73rd & Grand Ave Cleveland 4 Ohio
MISSING LINK—Mid-States Welder Mfg Co
Mission Appliance Corp Hyde Park Station Los Angeles 43 Calif
Mission Western Engineers Inc—see Western Gear Corp
Mitchell Industries Inc Box 17 Municipal Airport Mineral Wells Tex
Mitchell Lighting Div Compco Corp 1800 N Spaulding Ave Chicago 47 Ill
Mitchell Mfg Co—see Mitchell Lighting Div
Mitchell Moulding Co 1501 Circle Ave Forest Park Ill
Mitchell Rand Insulation Co 51 Murray St NY 7 NY
Mitchell-Rand Mfg Corp Insulation Div—see Mitchell Rand Insulation Co
MITCO—Mitchell Moulding Co
MITEE—International Electric Fence Co Inc
MITI-MAST—Utility Service Co Inc
MOBIL BREEZE—Frigid Inc
Mobile Aerial Towers Inc 1730 N Harrison St Fort Wayne Ind
MOBILEX—Day-Brite Lighting Inc
MOCO—Michigan Oven Co

Modern Electric Laboratory—see Blue M Electric Co
Modern Light Co Inc 7809 Maplewood Industrial Court St Louis 17 Mo
Modern Swimming Pool Co Inc 1 Holland Ave White Plains NY
MODERNAIRE—Electro Lighting Corp
Modernheat Cable Corp P O Box 576 Kingsport Tenn
MODU-AIRE—United States Air Conditioning Corp
MODU GLO—Marvin Electric Mfg Co
MODU-LUMINUS—Luminous Ceilings Inc
MODU-WAVE—Sclaky Bros Inc
MODULAR—Couch (S H) Co Inc
MODULITE—Major Equipment Co Inc
Moe Light Div Thomas Industries Inc 410 S 3rd St Louisville Ky
MOHAWK—Frigid Inc
MOHAWK—Surrette Storage Battery Co Inc
MONA—GRAPH—Minneapolis-Honeywell Regulator Co Industrial Div
MOISTEMP—Rockbestos Products Corp
MOISTURE MAGNET—Remington Corp
Moldcast Mfg Co 236 South St Newark 5 NJ
Mole-Richardson Co 937 N Sycamore Ave Hollywood 38 Calif
Molly Corp 230 N Fifth St Reading Pa
MOLOCHIL—Capewell Mfg Co
Moloney Electric Co 5390 Birchard Blvd St Louis 20 Mo
MON-O-LAG—Monarch Electric Corp
Mona Industries Inc Paterson 17 NJ
MONA SOUTHERN—Mona Industries Inc
MONA STRIP—Mona Industries Inc
MONAMINE—Mona Industries Inc
MONARCH—Clark-Cooper Co Inc
Monarch Electric Corp 118 E First St Jamestown NY
Monarch Fuse Co Ltd—see Monarch Electric Corp
Monarch Lighting Fixture Corp—see Ender-Monarch Corp
MONELITE—Dockson Corp
Monitor Controller Co 99 Grove St Rockland Mass
MONITOR—Monitor Controller Co
MONO-BOLT—Chance (A B) Co
MONO MOTOR—Redmond Co Inc
MONOGRAM—Refrigerating Specialties Co
MONOLARM—Russell & Stoll Co Inc
MONOMAST—Hyster Co
MONOTUBE—Union Metal Mfg Co
MONOWATT—General Electric Co
MONOWELD—All-State Welding Alloys Co Inc
MONSON—Portland-Monson State Co
Moon Mfg Co 108 N Jefferson St Chicago 6 Ill
MOORE—Chisholm-Moore Hoist Div
MORELITE—Rambusch Decorating Co
Morrison Steel Products Inc 601 Amherst St Buffalo 7 NY
Morrow Co 400 W Madison St Chicago 6 Ill
Morse (Frank W) Co 354 Congress St Boston 10 Mass
Morse Chain Co Borg Warner Corp Ithaca NY
Mossman (Donald P) Inc Brewster NY
MOTO-LIFT—Sawley Steel Products Inc
Moto-Trac Co 1953 E 59 St Cleveland 3 Ohio
MOTODRIVE—Reeves Pulley Co
MOTOMOUNT—U S Electrical Motors Inc
MOTOPRENE—Parantite Wire & Cable Div Essex Wire Corp
Motor Generator Corp—see Hobart Bros
MOTOR SENTINEL—Bryant Electric Co
Motor X Products Co—see Air-Hydraulics of Indiana
MOTORDROR—Broan Mfg Co Inc
MOTORDUCERS—Falk Corp
Motorssearch Co 1600 Junction Ave Racine Wis
MOTORLARM—Panellit Inc
MOTORLITE—Ward Leonard Electric Co
Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill
MOTOROL—Automatic Control Co
MOTORTRON—Bussmann Mfg Div McGraw-Edison Co
MOTRAC—Motorola Communications & Electronics Inc
Mueller Climatrol Div Worthington Corp 2005 W Oklahoma Ave Milwaukee 1 Wis
Mueller Electric Co 1555G E 31 St Cleveland 14 Ohio
Mueller (L J) Furnace Co—see Mueller Climatrol Div
Mullenbach Electric Mfg Co—see Mullenbach Div
Mullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif
Multi-A-Frame Div Ainsworth Precision Castings Co 1471-77 E Atwater St Detroit 7 Mich
MULTALARM—Automatic Control Co
MULTI—Duro Fittings Co
Multi-Arm Corp 465 Leigh Ave Union NJ
MULTI-BREAKER—Square D Co
MULTI-CALKS—Rawplum Co Inc
Multi-Clean Products Inc 2277 Ford Parkway St Paul 16 Minn
MULTI-COM—Radio Corp of America
MULTI-DIAMETER—U S Expansion Bolt Co
MULTI-DUTY—Emerson Electric Mfg Co
Multi Electric Mfg Inc 4223 W Lake St Chicago 24 Ill
MULTI-MOUNT—Blackburn (Jasper) Corp
MULTI-MOUNT—Sterling Electric Motors Inc
MULTI-SIZE—Diamond Expansion Bolt Co Inc
MULTI-STALP—Scranton Storage Battery Corp
MULTI-TALIC—Simpson (Mark) Mfg Co Inc
MULTI-TAP—Woodhead (Daniel) Co
MULTI USE—McLarty Systems
MULTI-USE—U S Expansion Bolt Co
MULTI-VENT—Pyle-National Co
MULTIDUCTOR—Ajax Electrothermic Div
MULTIFONE—Simpson (Mark) Mfg Co Inc

MULTIGUARD—Lincoln Electric Co
MULTIPATH—Exmet Electrical Corp
MULTIPLE UNIT—Hevi Duty Electric Co
MULTISCOPIC—Kulka Electric Corp
MULTITAP—Anderson (Albert & JM) Mfg Co
MULTITROL—Ward Leonard Electric Co
Muncie Gear Works Inc P O Box 433 Cordele Ga
MUREX—Metal & Thermic Corp
Murray (D A) Co Inc 632 N Mill St Tipton Ind
Murray Equipment Co Inc 14011 Oakland Ave Detroit 3 Mich
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY
MUST-TALK—Fanon Electronic Industries Inc
Mutual Foundry & Machine Co—see Potter & Rayfield Inc
MY-T-MIDGET—American Rectifier Corp
Mycalex Corp of America 125 Clifton Blvd Clifton NJ
Mystik Adhesive Products Inc 2635 N Kildare Ave Chicago 39 Ill

N

N E BEND—Burbank Electrical Products
NEM—National Engineering & Mfg Co
N J—New Jersey Porcelain Co Inc
N L Corp 2480 E 22 St Cleveland 15 Ohio
N T C—Keystone Carbon Co Inc
N W L—Nothelfer Winding Labs Inc
N Y Revolving Portable Elevator Co—see Revolver Co
NAIL-IT—Eagle Electric Mfg Co Inc
NALCO—National Lead Co
NALCO—North American Electric Lamp Co
NALCOBRITE—North American Electric Lamp Co
NAMCO—National Acme Co
Nankervis (Geo L) Co 15300 Fullerton Ave Detroit 27 Mich
NARADGET—Naragansett Wire Co
NARAWIRE—Naragansett Wire Co
NARAX—Naragansett Wire Co
Naragansett Wire Co 541 Pawtucket Ave Pawtucket RI
Natalie Machine & Tool Co 339 Highway #17 Carlstadt NJ
Natco Corp 327 Fifth Ave Pittsburgh 22 Pa
NATIONAL—General Hardware Mfg Co Inc
National Acme Co Electrical Mfg Div 170 E 131 St Cleveland 8 Ohio
National Appliance Co—see Ventrola Mfg Co
National Band & Tag Co 721 York St Newport Ky
National Carbon Co 30 E 42 St New York 17 NY
National Cathode Corp 317 E 34 St New York 16 NY
National Decalcomania Corp 236-38-40 N 60 St Phila 39 Pa
National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio
National Electric Controller Co 7070 Glenwood Ave Chicago 26 Ill
National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa
National Electric Welding Machine Co 1846-1916 W Trumbull St Bay City Mich
National Engineering & Mfg Co 16th & Lamine St Sedalia Mo
National Fireproofing Corp—see Natco Corp
National Jerrold Systems Inc—see Jerrold Electronics Corp
NATIONAL-LAKE—National Time & Signal Corp
National Lead Co 111 Broadway N Y 6 NY
National Pole & Treating Co—see National Pole & Treating Div
National Pole & Treating Div Minnesota & Ontario Paper Co 500 Investors Bldg Minneapolis 2 Minn
National Poultry Band Co—see National Band & Tag Co
National Price Service—see Henderson-Hazel Corp
National Specialties Co Inc 1902 Howell St Ft Wayne 7 Ind
National Super Service Co 1946 N 13 St Toledo Ohio
National Supply Co Tubular Div Two Gateway Center (P O Box 416) Pittsburgh 30 Pa
National Time & Signal Corp 21800 Wyoming Ave Detroit 37 Mich
National Tube Div U S Steel Corp 525 William Penn Pl Pittsburgh 30 Pa
National Varished Products Corp—Natvar Corp
NATLOOP—National Electric Coil Div
NATSCO—National Time & Signal Corp
NATURLITE—Light & Power Utilities Corp
Natvar Corp 211 Randolph Ave Woodbridge NJ
NAUTILUS—Linemaster Switch Corp
Naylor (E V) Laboratories Inc 26 Manorhaven Blvd Port Washington NY
NE-O-LITE—Speedex Mfg Co
Ne-O-Lite Mfg Co—see General Cement Mfg Co
NEATPAK—Federated Metals Div American Smelting & Refining Co
NEBROC—HiTemp Wires Inc
NECCOBOND—National Electric Coil Div
NELEX—Nelson Electric Mfg Co
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla
Nemco Electric Co 210 Second Ave Seattle 4 Wash
NEMCRAFT—Nemco Electric Co
NEO-GLO—Market Electric Products Inc
Neo-Ray Products Inc 315 E 22 St N Y 10 NY
NEO-SOL—Charleston Rubber Co
NEO-TIME—Electric Controller & Mfg Co

NEOCORK—Auburn Mfg Co
NEOLAY—Kaiser Aluminum & Chemical Sales Inc
NEOLINE—Anaconda Wire & Cable Co
NEOSIGN—Anaconda Wire & Cable Co
NEOTEL—General Cable Corp
NEOTEX—Woodward (Daniel) Co
NEOTROL—Electric Controller & Mfg Co
Nepe Mfg Co 4230 N Sayre Chicago 34 Ill
NEPTUNE—Recora Co Inc
NEUTRO—Dunton (MW) Co
NEVA GLARE—Marlow Lights Inc
NEVER-CREEP—Chance (A B) Co
NEVER-SLIP—Miller Equipment Co Inc
New England Carbide Tool Co Inc 55 Commercial St Medford 55 Mass
New England Electrical Works Inc 365 Main St Lisbon NH
New Jersey Fire Alarm Co—see Newark Dist Telegraph Co
New Jersey Meter Co Inc 350 Leland Ave Plainfield NJ
New Jersey Porcelain Co Inc Plum St & N Y Ave (P O Box 908) Trenton 5 NJ
New Jersey Zinc Co 160 Front St New York 38 NY
NEW YORKER—Sun-Lite Mfg Co
Newage Industries Inc 222 York Rd Jenkintown Pennsylvania
Newage International Inc—see Newage Industries Inc
Newark District Telegraph Co 372 Plane St Newark 2 NJ
Newart Mfg Co 6725 Machinery Ave Cleveland Ohio
Newcomb Audio Products Co 6824 Lexington Ave Hollywood 38 Calif
Newman Electric Motors Inc 357 Wilson Ave Newark 5 NJ
NIAGARA—Erie Electric Co Inc
Niagara Transformer Co—see Erie Electric Co Inc
Niagara Transformer Corp 1751 Dale Rd Buffalo 25 NY
NIAGRITE—Johns-Manville
Nicaid Div Gould-National Batteries Inc Easthampton Mass
Nice Ball Bearing Co 30th & Hunting Park Ave Phila 40 Pa
Nichols Wire & Aluminum Co 1725 Rockingham Rd Davenport Iowa
Nickel Cadmium Battery Corp—see Nicad Div
NICRO—Fresh-Aire Div Cory Corp
NIGHTINGALE—Adjustable Fixture Co
NIGHTLIGHTER—Fisher-Pierce Co
Nikoh Tube Co 5000 S Whipple St Chicago 32 Ill
NILSTAIN—Driver (Wilbur B) Co
9000 ARC—Mid-States Welder Mfg Co Inc
NITE-BEAM—Eagle Electric Mfg Co Inc
NO FLAME COR—Corish Wire Co Inc
NO-LIFT—Self-Lifting Piano Truck Co
NO-SHOK—Bell Electric Co
NO-SPARK—Co-operative Utilities Co Inc
NOBATRON—Sorensen & Co Inc
NOBRUSH—Georator Corp
NOCRETE—Orangeburg Mfg Co Inc
NODRESEAL—Johns-Manville
Noel Mfg Co 3 W 18 St New York 11 NY
NOKORODE—Dunton (MW) Co
NOLCO—Auburn Mfg Co
NORBLACK—Ajax Electrothermic Div
NORBLD—Northern Blower Co
NORCA—Ajax Electrothermic Div
NORCARB—Ajax Electrothermic Div
NORCON—Ajax Electrothermic Div
NORCONITE—Ajax Electrothermic Div
Nordberg Mfg Co 3073 S Chase Ave Milwaukee 1 Wis
NORGAN—Ajax Electrothermic Div
NORJAX—Ajax Electrothermic Div
NORIK—General Hardware Mfg Co Inc
Norly Mfg Corp P O Box 669 Covington Ky
NORLICO—Northern Light Co
NORMAG—Ajax Electrothermic Div
NORMAGAL—Ajax Electrothermic Div
Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY
NORMOLITH—Ajax Electrothermic Div
NORPATCH—Ajax Electrothermic Div
NORSAND—Ajax Electrothermic Div
NORSIL—Ajax Electrothermic Div
NORSOLV—Northwoods Mfg Chemists Inc
North American Electric Lamp Co 1520 North 13th St St Louis 6 Mo
NORTH-LITE—Great Northern Mfg Corp
North Shore Nameplate Inc 214-27 Northern Blvd Bayside L I NY
NORTHERN-AIRE—Great Northern Mfg Corp
Northern Blower Co 6434 Barberton Ave Cleveland 2 Ohio
Northern Incandescent Lamp Co 1 Newark St Hoboken NJ
Northern Light Co 1661 N Water St Milwaukee 2 Wis
NORTHERN LIGHTS—Northern Incandescent Lamp Co
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill
NORTHWIND—Emerson Electric Mfg Co
Northwoods Mfg Chemists Inc Porterfield Wis
NORVIT—Ajax Electrothermic Div
Nothelfer Winding Labs Inc 5 Albemarle Ave (P O Box 455) Trenton 3 NJ
Novelty Lighting Corp—see N L Corp
NOVOID—G & W Electric Specialty Co
NU-AIR—Meier Electric & Machine Co Inc
NU-BLAC—Star Porcelain Co
NU-BRAZE—American Silver Co Inc

NU-LITE—Dependable Electric Mfg Co Inc
NU-WAY—Marshall (John) Associates Inc
NUARC—Electric Arc Inc
NUBEL—Edwards Co Inc
Nulone Inc Madison & Red Bank Roads Cincinnati 27 Ohio
Nutting Truck and Caster Co 1201 W Division St Faribault Minn
NUWAY—Jordan Electric Products Div Electric Storage Battery Co
Nye Tool Co 4120-30 Fullerton Ave Chicago 32 Ill
NYLAFLOW—Polymer Corp
NYLASINT—Polymer Corp
NYLATRON—Polymer Corp
NYLAWELD—Polymer Corp
NYLCLAD—Belden Mfg Co
NYLEZE—Phelps Dodge Copper Products Corp
NYLOX—Hardiman (H V) Co Inc
NYLTENAMENEL—Belden Mfg Co
NYTROL—Walker Brothers

O

O-B—Ohio Brass Co
O-E—Arro Expansion Bolt Co
OEM—Oliver Electrical Mfg Co
OK—Appleton Rubber Co Inc
O K—General Cable Corp
O-K—Henderson Electric Co
O P BREAKER—Adam (Frank) Electric Co
O-PAC—Opad Electric Co
OTC—Owatonna Tool Co
O-Z—Zernickow (O) Co
O Z Electrical Mfg Co Inc 262 Bond St Brooklyn 17 NY
OAMCO—Overbag & Ayres Mfg Co
O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif
OBROUD—Crouse-Hinds Co
OBSERVER—Blonder-Tongue Laboratories Inc
OCCO—Tocco Div Ohio Crankshaft Co
OCT-O-DUCT—Soapstone Duct Co
OCTA-TUBE—Millerbernd Mfg Co
OCULITE—Burton Mfg Co
ODOR-MASTER—Edco International Corp
ODOROUT—Westinghouse Electric Corp Lamp Div
OFFICER—Benjamin Electric Mfg Co
Ohio Brass Co 380 N Main St Mansfield Ohio
Ohio Carbon Co 12508 Berea Rd Cleveland 11 Ohio
OHIOHM—Ohio Carbon Co
OHM-SPUN—States Co
Ohmite Mfg Co 3601 Howard St Skokie Ill
OHMOLITE—Wilmington Fibre Specialty Co
OHMSTONE—Johns-Manville
Oilgear Co 1579 W Pierce St Milwaukee 4 Wis
OILIFIER—Controls Co of America
OILITE—Amplex Div Chrysler Corp
OKLIP—Burdry Corp
OKOCORD—Okonite Co
OKOLENE—Okonite Co
OKOLITE—Okonite Co
Okonite Co Passaic NJ
Okonite-Callender Cable Co—see Okonite Co
OKOPRENE—Okonite Co
OKOSEAL—Okonite Co
OKOTHERM—Okonite Co
OKOVAR—Okonite Co
Okon (A L) Co Inc 109-02 Van Wyck Expressway South Ozone Park NY
OLD FORGE—Quality Tools Corp
Oliver Electrical Mfg Co P O Box 217 Battle Creek Mich
Oliver Iron & Steel Corp—see Oliver Electrical Mfg Co
OLYMPIA—Benjamin Electric Mfg Co
OLYMPIA—Lint (Clyde W)
OLYMPIC—Sun-Lite Mfg Co
Olympic Instruments Inc Vashon Wash
Omak Industries Inc 9701 S E McLoughlin Blvd Portland 22 Ore
OMEGA—Wakefield Co
OMEGA-RAY—Luxor Lighting Products Inc
OMNI-GLOW—Industrial Devices Inc
Onan (D W) & Sons Inc 2515 University Ave S E Minneapolis 14 Minn
ONE-SPOT—Hein-Werner Corp
1000 LINE—Wakefield Co
ONE TIME—Ware Fuse Corp
O'Neill-Irwin Mfg Co 427 Eighth Ave Lake City Minn
ONEPACK—Electric Products Co
ONLI—Perflecto Co
Opad Electric Co 43 Walker St New York 13 NY
OPALITE—Lightoller Inc
OPALUX—Lightoller Inc
OPTIPLEX—Lightoller Inc
OPTOMATIC—Trico Fuse Mfg Co
Orangeburg Mfg Co Inc 375 Park Ave New York 22 NY
ORBLITE—Stebor Mfg Co
ORGANO-FLUX—London Chemical Co Inc
ORGOBLOS—Spencer Turbine Co
ORTHO—Gibson Mfg Co
ORTO—Line Material Industries
Osoco Mfg Co P O Box 7268 Ft Worth Tex
Oster Mfg Co 1340 E 289 St Wickliffe Ohio
OVALITE—Kiegl Bros
OVALITE—Line Material Industries
OVALTUBE—Plastoid Corp

Overbagh & Ayres Mfg Co 411 S Clinton St Chicago 7 Ill
 Overly-Hautz Co 11500 Madison Ave Cleveland 2 Ohio
 Oviatt (D C) Co 2174 Lakeside Ave Cleveland 14 Ohio
 Owatonna Tool Co 374 N Cedar St Owatonna Minn
 Owens Illinois Glass Co—see Kimble Glass Co
 Oxford Electric Corp Hudson Lamp Div—see Hudson Lamp Co
 OXOFF—Anacorda Wire & Cable
 Oxwall Tool Co Ltd 928 Broadway New York 10 NY
 OZITE—G & W Electric Specialty Co

P

PAD Inc—see Producers & Distributors Inc
 P-A-X—Automatic Electric Co
 P & C Tool Co Box 5926 Milwaukee P O Portland 22 Ore
 PD-X—Phelps Dodge Copper Products Corp
 PIV—Link-Belt Co
 P & K—Pfaff & Kendall
 PLM Products Inc 3871 W 150 St Cleveland 11 Ohio
 P-N—Pyle-National Co
 P & P—Potter & Brumfield Div
 PO—Pekco Co
 PR—Plymouth Rubber Co Inc
 P & R—Potter & Rayfield Inc
 P & S—Pass & Seymour Inc
 PTC—Precision Transformer Corp
 PUC—Royal Electric Corp
 P-W Industries Inc 1120 Roosevelt Blvd Philadelphia 15 Pa
 P & W Co—see Patrick & Wilkins Co
 PWC—Plastic Wire & Cable Corp
 PACEMAKER—Hubbell (Harvey) Inc
 PACEMAKER—Lightolier Inc
 PACEMAKER—Wakefield Co
 Pacific Electric Mfg Co—see Federal Pacific Electric Co
 PACKAGE-AIRE—United States Air Conditioning Corp Packard Electric Div General Motors Corp Warren Ohio
 Pace Steel & Wire Div American Chain & Cable Co Inc P O Box 692 Monessen Pa
 PACEPHONE—Femco Inc
 Paine Co Fullerton Ave & Westgate Rd Addison Ill
 PAK-IT—American Pulley Co
 Palco Mfg Co 1260 Pennsylvania Ave San Francisco 7 Calif
 Paley Mfg Corp—see Circle Air Industries Inc
 Palmer Electric & Mfg Co 24 Water St Wakefield Mass
 PAN-L-HEAT—Jensen Inc
 Panalarm Div Panellit Inc 7401 N Hamlin Ave Skokie Ill
 Panalarm Products Inc—see Panalarm Div Panellit Inc
 PANCAKE—Wiremold Co
 PANEL-GLO—Benjamin Electric Mfg Co
 PANEL-LUMINOUS—Luminous Ceilings Inc
 PANELAIRE—Lighting Products Inc
 PANELGRAPH—Panellit Inc
 Panellit Inc 7401 N Hamlin Ave Skokie Ill
 PANELSCOPE—Waterman Products Co Inc
 PANELUX—Lighting Products Inc
 Panelyte Div St Regis Paper Co 261 Madison Ave New York 16 NY
 PANG—Automatic Vulcanizers Corp
 PANTRON—Control Panel Corp
 PAR-BEAM-LITE—Swiveller Co Inc
 PARACORE—Kaiser Aluminum & Chemical Sales Inc
 PARACOTE—Paranite Wire & Cable Div Essex Wire Corp
 PARADOME—Holophone Co Inc
 PARADUCT—Paranite Wire & Cable Div Essex Wire Corp
 PARAFLEX—Paranite Wire & Cable Div Essex Wire Corp
 PARAFLO—Day-Brite Lighting Inc
 Paragon Electric Co 1600-12th St Two Rivers Wis
 PARAGRID-TILE—Wilson (J A) Lighting & Display Inc
 PARAGROOVE—Line Material Industries
 PARALINE—Allis-Chalmers Mfg Co
 PARALOUVER—Day-Brite Lighting Inc
 PARALUM—Paranite Wire & Cable Div Essex Wire Corp
 PARAMOUNT—Earl Electric Mfg Corp
 PARAMOUNT—Haartz-Mason Inc
 Paramount Industries Inc G-1080 Ballanger Rd Flint 4 Mich
 Paranite Wire & Cable Div Essex Wire Corp Marion Ind
 PARAPLASTIC—Haartz-Mason Inc
 PARAPRENE—Paranite Wire & Cable Div Essex Wire Corp
 PARARITE—Paranite Wire & Cable Div Essex Wire Corp
 PARASEAL—Paranite Wire & Cable Div Essex Wire Corp
 PARASYN—Paranite Wire & Cable Div Essex Wire Corp
 PARATHERM—Paranite Wire & Cable Div Essex Wire Corp
 PARATWIN—Paranite Wire & Cable Div Essex Wire Corp
 PARAUSE—Paranite Wire & Cable Div Essex Wire Corp
 Parco Mfg Co—see Rogers Electric Laboratories Inc

Park Metalware Co Inc—see Xcelite Inc
 Park Nameplate Co Inc 34-10 Linden Place Flushing NY
 Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif
 PARQUAY—Brown Co
 Parr Electric Co—see Parr Mfg Co
 Parr Mfg Corp 44 Austin St Newark 2 NJ
 Partlow Corp 230 Campion Rd New Hartford New York
 Patrick Carter & Wilkins Co—see Patrick & Wilkins Co
 Patrick & Wilkins Co 51 N Seventh St Phila 6 Pa
 Pass & Seymour Inc Syracuse 9 NY
 PASSMOUR—Pass & Seymour Inc
 PATENT-FLEX—Wili-Son Mfg Co
 Patent Scaffolding Co Inc 38-21 12th St L I C 1 NY
 PATH FINDER—Cannon Electric Co
 PATH OF LIGHT—Touch-Plate Mfg Corp
 PATTERN-LITE—Keystone Electric Mfg Co
 Pattern Products Co P O Box 135 Union NJ
 PAYMASTER—Cincinnati Time Recorder Co
 PEAK DRILL—Star Expansion
 Peck Stow & Wilcox Co 274 Center St Southington Conn
 Pedrick Tool & Machine Co 3640 N Lawrence St Phila 40 Pa
 PEDRIMATIC—Pedrick Tool & Machine Co
 PEE-WEE—Mueller Electric Co
 PEEP SPCT—Neo-Ray Products Inc
 Peer Inc 1220 Milton St Benton Harbor Mich
 PEERLESS—General Cable Corp
 PEERLESS—Plastic Wire & Cable Corp
 Peerless Electric Co 1401 W Market St Warren Ohio
 Peerless Mfg Co—see Valley Fan Mfg Co
 PEERLITE—Guth (Edwin F) Co
 PEGI—Adale Mfg Co
 Pekco Co 1227 McDonald Ave Brooklyn 30 NY
 PEMCO—Parker Electrical Mfg Co
 PEMCO—Philadelphia Electrical & Mfg Co
 PEN RAY—Ultra-Violet Products Inc
 Penco Div Alan Wood Steel Co 200 Brower Ave Oaks Pa
 PENDLUM—Versen (Kurt) Co
 PENDOME—Versen (Kurt) Co
 Penetone Co 74 Hudson Ave Tenafly NJ
 Penetray Corp 615 Front St Toledo 5 Ohio
 PENETROX—Burdry Corp
 PENN—Solar Electric Corp
 Penn Controls Inc Goshen Ind
 PENN-CRIMPS—Penn-Union Electric Corp
 Penn Electric Switch Co—see Penn Controls Inc
 Penn Fibre & Specialty Co Inc 2024 E Westmoreland St Phila 34 Pa
 Penn (Wm) Fluorescent Light Mfg Co 1228 N 31 St Philadelphia 21 Pa
 PENN LITE—Penn (Wm) Fluorescent Light Mfg Co
 PENN-ONS—Penn Union Electric Corp
 PENN-SLEEVES—Penn Union Electric Corp
 PENN-STEMS—Penn-Union Electric Corp
 PENN-TAPS—Penn-Union Electric Corp
 Penn-Union Electric Corp 315 State St Erie Pennsylvania
 PENN-WRAPPER—Penn-Union Electric Corp
 PENNDRIILL—Pennsylvania Drilling Co
 PENNLUGS—Penn-Union Electric Corp
 PENNSBURG—Penn (Wm) Fluorescent Light Mfg Co
 Pennsylvania Drilling Co Masonry Drill Div 1201 Bankville Rd Pittsburgh 16 Pa
 Pennsylvania Transformer Co—see Pennsylvania Transformer Div
 Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa
 PENOLENE—Penetone Co
 PERECO—Pereny Equipment Co
 Pereny Equipment Co 893 Chambers Rd (Station A Box 8153) Columbus Ohio
 Pereny Pottery & Equipment Co—see Pereny Equipment Co
 PERFALUX—Lightolier Inc
 Perfectite Co 1457 E 40 St Cleveland 3 Ohio
 Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville L I NY
 PERFECTAIRE—Perfect-Line Mfg Corp
 Perfection Industries Div Hupp Corp 1135 Ivanhoe Rd Cleveland 10 Ohio
 Perflex Controls—see General Controls Co
 Performance Measurements Co 15301 W McNichols Detroit 35 Mich
 PERM-ALIGN—Cummins Portable Tool Div John Oster Mfg Co
 PERMA-CHARGER—Jordan Electric Products Div
 Electric Storage Battery Co
 PERMA-CODE—Brady (W H) Co
 Perma-Pipe Corp P O Box 525 Middleboro Ky
 Permacel-Lepages Inc U S Highway # 1 New Brunswick NJ
 Permacel Tape Corp—see Permacel-Lepages Inc
 PERMAFLECTOR—Pittsburgh Reflector Co
 PERMAKAY—Motorola Communications & Electronics Inc
 PERMALINE—Line Material Industries
 Permanent Products Co—see Kaiser Aluminum & Chem Sales
 PERMAPRENE—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
 PERMI-CAL—Toplight Corp
 Peschel Electronics Inc RFD # 1 Patterson NY
 Peters Co IM Div Portland Ore
 Peters Mfg Co 162 Old Colony Ave Wollaston 70 Mass
 PETRO-DURE—Phelps Dodge Copper Products Corp

Petter Diesel Engine Div Brush Abee Inc 34-14 58th St Woodside 77 NY
 PETTI-SEL—Radio Receptor Co Inc
 PEXTO—Peck Stow & Wilcox Co
 Pfaff & Kendall 84 Foundry St Newark 5 NJ
 Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass
 PHALOW—Phalo Plastics Corp
 PHANO-CHARGER—General Electric Co
 PHAROS—Perfectite Co
 PHASEFORMER—Eastern Specialty Co
 PHAZGARD—Chronoflash Co
 Phelps Dodge Copper Products Corp 300 Park Ave New York 22 NY
 Phelps Fan Mfg Co 715 Thomas St Little Rock Ark
 Phelps Mfg Co—see Phelps Fan Mfg Co
 PHIL-TROL—Phillips Control Corp
 Philadelphia Electrical & Mfg Co 1200-36 N 31 St Phila 21 Pa
 PHILITE—Ruby-Phillite Corp
 Phillips (Oscar) Co 9701 Reading Rd (Box 21) Cincinnati 15 Ohio
 Phillips Control Corp 59 W Washington St Joliet Ill
 PHILPLUG—New England Carbide Tool Co Inc
 PHOENIX—Commercialaire Corp of America
 PHOENIX—Friold Inc
 PHONACALL—Sperli Faraday Inc
 PHOSTUBE—All-State Welding Alloys Co Inc
 PHOTO-TROLLER—Westinghouse Electric Corp
 Photobell Co Inc 43 Vesey St New York 7 NY
 Photomation Inc 96 S Washington Ave Bergenfield NJ
 PHOTOSWITCH—Electronics Corp of America
 PHOTONIC—Weston Instruments
 PICK-OFF—Toplight Corp
 PICOMA—Pine Coupling Mfrs Inc
 Pieper-Lillard Div Jasper Blackburn Corp 1525 Woodson Rd St Louis 14 Mo
 Pierce Renewable Fuses Inc Box F Leicester New Jersey
 PIERCEWAY—Massey (A H) Inc
 PIGMY—Capewell Mfg Co
 PIN-GRIP—Star Expansion
 Pines Engineering Co Inc 601 Walnut St Aurora Ill
 PIOLITES—Wilson (J A) Lighting & Display Inc
 PIOHEER—Clark-Cooper Co Inc
 Pioneer Electrical Mfrs—see Cutler-Hammer Inc
 Pioneer Gen-E-Motor Co 5841 W Dickens St Chicago 39 Ill
 Pipe Coupling Mfrs Inc P O Box 488 Martins Ferry Ohio
 PIPEMASTER—Erie Tool Works
 Piqua Machine & Mfg Co 441 S College St Piqua Ohio
 PIRAC—Electric-Cord Mfg Co Inc
 PISTOL-GRIP—Anderson Electric Corp
 Pitman Mfg Co Grandview Mo
 PITT—Thepitt Mfg Co
 Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa
 Pittsburgh Standard Conduit Co 61 Bridge St Pittsburgh 23 Pa
 PLANETOR—Price & Rutzebeck
 PLANPAK—Automatic Control Co
 PLANTE—Gould-National Batteries Inc
 PLASONE—Chester Cable Corp
 PLAST-O-PRENE—Snvder (M L) & Son Inc
 Plaster-Eye Co 2560 Nobletown Rd Pittsburgh 5 Pa
 PLASTI-FLEX—Auburn Mfg Co
 Plastic Wire & Cable Corp E Main St Jewett City Conn
 PLASTIC—C & D Batteries Inc
 PLASTICELL—C & D Batteries Inc
 PLASTICLINER—Duro-Test Corp
 PLASTICORD—Chester Cable Corp
 PLASTICORE—Chester Cable Corp
 PLASTICOTE—Chester Cable Corp
 Plastcraft Inc—see Mastercraft Plastics Co Inc
 PLASTILIFE—David's Gloves Inc
 Plastiline Inc 2 Intervale St White Plains NY
 PLASTITE—Whitney Blake Co
 Plastoid Corp 42-61 24th St L I C 1 NY
 PLASTOLIER—Metalcraft Products Co Inc
 PLASTONE—Co-operative Utilities Co Inc
 PLEXI-TONE—Penn (Wm) Fluorescent Light Mfg Co
 PLEXILUX—Sun-Lite Mfg Co
 PLEXLUME—Gruber Bros Inc
 PLEXOLINE—Day-Brite Lighting Inc
 PLI-A-BAND—Memco Engineering & Mfg Co Inc
 PLUG-IN—Square D Co
 PLUGMASTER—Sperli Faraday Inc
 PLUGMOLD—Wiremold Co
 Plummer (Walter A) Co—see Zipertubing Co
 PLUS PANEL—General Switch Co
 PLUS-POWER—Ramset Fastening System
 Plymouth Rubber Co Inc 23 Revere St Canton Mass
 PNEULATOR—Mine Safety Appliances Co
 PNEU-DRAULIC—Allis-Chalmers Mfg Co
 POCKET-SIZE—Champion DeArment Tool Co
 POCKETSCOPE—Waterman Products Co Inc
 POLE-MASTER—Klein (Mathias) & Sons
 POLE STAR—Pennsylvania Transformer Div
 Poles Inc E 706 Sprague Ave Spokane 3 Washington
 POLICARB—Driver (Wilbur B) Co
 Polis Mfg Co Toledo Ave & E 28 St Lorain Ohio
 Poliak (Joseph) Corp 81-95 Freepoint St Boston 22 Mass
 Poliak Luminescent Corp 732 S Federal St Chicago 5 Ill

POLY-PLATE—Brady (W H) Co
 POLY-V—Raybestos-Manhattan Inc
 Polyken Sales Div Kendall Co 309 W Jackson Blvd
 Chicago 6 Ill
 Polymer Corp 2120 Fairmount Ave Reading Penn-
 sylvania
 Polymer Corp of Pa—see Polymer Corp
 POLYPERCO—Polymer Corp
 POLYRANGER—Sensitive Research Instrument Corp
 Porcelain Products Co 224 N Patterson St Carey
 Ohio
 PORT-A-PHONE—Feiler Engineering & Mfg Co
 PORT-O-REEL—Industrial Electrical Works
 PORT-O-VENT—Reed Unit-Fans Inc
 PORTA-BAND—Porter-Cable Machine Co
 PORTA DRIVE—Muncie Gear Works Inc
 PORTA-FLEX—Gardner Products Co
 PORTA-KALL—Loge (J M) Sound Engineers
 Portable Light Co Inc 216 William St N Y 38
 NY
 PORTAIR—Coppes Engineering Corp
 PORTALITE—Carpenter Mfg Co
 Porter-Cable Machine Co 700 Marcellus St Syracuse
 4 NY
 Portland-Monson Slate Co 465 Congress St Portland
 Me
 PORTO—Hessel (W F) Co Inc
 PORTO PAC—Electric Arc Sales Co
 PORTO SYSTEM—Hessel (W F) Co Inc
 PORTO-POWER—Blackhawk Mfg Co
 Portomac Inc 1521 E Nine Mile Detroit 20 Mich
 POSITECT—S & C Electric Co
 POSITIVE SEAL—Allis-Chalmers Mfg Co
 POSITROL—S & C Electric Co
 POST-LITE—Great Northern Mfg Corp
 Post Machinery Co Electronic Products Div 140
 Elliott St Beverly Mass
 POSTLITE—Drake Mfg Co
 POSTOP—Holophane Co Inc
 Potter & Brumfield Div American Machine and Foundry
 Co Princeton Ind
 Potter & Brumfield Inc—see Potter & Brumfield Div
 American Machine and Foundry Co
 Potter & Rayfield Inc P O Box 1042 Atlanta Ga
 POW-R-GARD—Anderson (Albert & J M) Mfg Co
 POWACALL—Edwards Co Inc
 Powder Power Tool Co—see Omark Industries Inc
 POWDRON—Bund Brook Oil-Less Bearing Co
 POWER-CAPSULE—Bogue Electric Mfg Co
 POWER CHARGER—Fox Products Co
 POWER CHIEF—Nordberg Mfg Co
 POWER KING—Goodall Rubber Co
 Power Line Fan Co Plainfield NJ
 POWER-LUME—Wheeler Reflector Co
 POWER-O-MATIC—Blue M Electric Co
 Power Plants Inc—see Electric Power Plants Corp
 POWER-SAFE—Warner Electric Brake & Clutch Co
 POWER STREAK—American Electric Cable Co
 POWERBEL—Auth Electric Co Inc
 POWERCON—Cornell-Dubilier Electric Corp
 Powercraft Corp 2215 De Kalb St St Louis 4 Mo
 POWERDUCT—Anacosta Wire & Cable Co
 POWERLOID—Guardian Electric Mfg Co
 POWEREEL—Industrial Electrical Works
 POWERLUME—Solar Light Mfg Co
 POWERMASTER—Lewis-Shepard Products Inc
 POWERPACT—Oswall Tool Co Ltd
 POWERPACT—Sperli Faraday Inc
 POWERPLUS Inc—Adam (Frank) Electric Co
 POWERS-AMERICAN—McCabe-Powers Body Co
 POWERSHOP—DeWalt Div American Machine &
 Foundry Co
 POWERSTAT—Mercoind Corp
 POWERSTAT—Superior Electric Co
 POWER-KORD—Royal Electric Corp
 POWER-PAK—Wingood Mfg Co
 POWER-RIB—Ohmrite Mfg Co
 POWER-STYLE—Square D Co
 Powrex Switch Co 36 Pleasant St Watertown Massa-
 chusetts
 POKALLOY—Okun (A L) Co Inc
 PRAYER LIGHT—Aerolux Lights Corp
 PRE-MARX—Premax Products Div Chisholm-Ryder Co
 Inc
 PRECIPITRON—Westinghouse Electric Corp Sturtevant
 Div
 PRECISION-CHARGE—Lincoln Electric Co
 Precision Thermometer & Instrument Co 1434 Brandy-
 wine St Philadelphia 30 Pa
 Precision Transformer Corp 2218 West Lake St Chi-
 cago 12 Ill
 Precision Welder Mfg Co 2218 W Lake St Chicago
 12 Ill
 PREENX—General Electric Co
 Preformed Lign Products Co 5349 St Clair Ave Cleve-
 land 3 Ohio
 Premax Products Div Chisholm-Ryder Co Inc College
 & Highland Aves Niagara Falls NY
 Prentiss Wabers Products Co—see Preway Inc
 Prep Corp Edgerton Wis
 PRES-SURE—Buchanan Electrical Products Corp
 PRES-T-O-HEAT—Triton Mfg Co Inc
 Prescolite Mfg Corp 2229 Fourth St Berkeley 10
 Calif
 PRESIDENTIAL—Pittsburgh Reflector Co
 PRESS LITES—Sun-Lite Mfg Co
 Presteel Co—see Prescolite Mfg Corp
 PRESSURE-LOCK—General Electric Co
 Pressure Products Corp—see Preway Corp
 PRESSWITCH—Hubbell (Harvey) Inc
 PRESTEST—Cutler-Hammer Inc
 PRESTO—Bogen-Presto Co
 Presto Recording Corp—see Bogen-Presto Co
 PREXLITE—Gruber Bros Inc
 PRIBRO—Price Bros Inc

Price Bros Inc 4301 W Madison Chicago Ill
 Price Electric Corp East Church & Second Sts Fred-
 erick Md
 Price & Rutzebeck P O Box 30 Hayward Calif
 PRINCESS—Curtis Lighting Div
 Principle Research & Development Corp 200 Citizens
 Bldg Aberdeen SD
 PRINCO—Precision Thermometer & Instrument Co
 Pringle Electrical Mfg Co 1900-1912 N Sixth St
 Philadelphia 22 Pa
 PRISMALUX—Lightolier Inc
 PRISMOLD—Guth (Edwin F) Co
 PRODUCERLITE—Solar Light Mfg Co
 Producers and Distributors Inc 1321 Hanover Ave
 Allentown Pa
 PRODUCTIMETER—Durant Mfg Co
 Production Planning Co—see Allen Cooler & Ventilator
 Inc
 PROFILE—Lightolier Inc
 PROGRAMONITOR—Counter & Control Corp
 Progress Mfg Co Inc Castor Ave & Tulip St Phila 34
 Pa
 Project Fixture Mfg Corp 55 Ongley St Rockville
 Centre NY
 PROJECTORAMA—Century Lighting Inc
 PROMATIC—General Control Co
 PROPELLAIR—Robbins & Myers Inc
 PROTECT-O-VANE—Minneapolis-Honeywell Regulator
 Co Industrial Div
 Protection Controls Inc 6000 N Legett Ave Chicago
 46 Ill
 PROTECTO-MASK—Mystik Adhesive Products Inc
 PROTECTO-LO—Minneapolis-Honeywell Regulator Co
 Industrial Div
 PROTECTROL—Automatic Control Co
 PROTEX—Woodhead (Daniel) Co
 PRY-LITE—Emerson-Pryme Co
 Pucel Enterprises Inc 3746 Kelley Ave Cleveland 14
 Ohio
 PUL-LIFT—Yale & Towne Mfg Co
 PULFLEX—Universal Metal Hose Co
 PULFUZSWITCH—Adam (Frank) Electric Co
 PULL-REEL—Naragansett Wire Co
 Pullman Vacuum Cleaner Corp 25 Buick St Boston
 15 Mass
 PULSESCOPE—Waterman Products Co Inc
 PULSOLITE—Electronic Control Corp
 PUMPTROL—Square D Co
 PUNCHY—Curtis Lighting Div Curtis-AllBrite Light-
 ing Inc
 PUR-AR-LITE—House-O-Lite Corp
 Pure Carbon Co Inc 441 Hall Ave St Marys Pa
 PUREBON—Pure Carbon Co Inc
 PUREMET—Pure Carbon Co Inc
 PURMA-DURE—Phelps Dodge Products Corp
 PUSHMATIC—Bulldog Electric Products Div
 Pyle-National Co 1344 N Kostner Ave Chicago 51
 Ill
 PYLE-O-FLEX—Pyle-National Co
 PYLE-STAR—Pyle-National Co
 PYLET—Pyle-National Co
 PYLON-LITE—Revere Electric Mfg Co
 PYR-O-VANE—Minneapolis-Honeywell Regulator Co
 Industrial Div
 PYRALITE—Gruber Bros Inc
 Pyramid Electric Co 1445 Hudson Blvd North Ber-
 gen NJ
 Pyramid Instrument Corp 630 Merrick Rd Lynbrook
 NY
 PYRANOL—General Electric Co
 PYRATHERM—Mercoind Corp
 PYREX—Corning Glass Works
 PYRO—Pyrometer Instrument Co
 PYROCAST—Pyrosil Inc
 PYROCON—Illinois Testing Laboratories Inc
 Pyrometer Instrument Co Bergenfield NJ
 Pyrosil Inc 1889 Front St Cuyahoga Falls Ohio
 PYROVENT—Bertram (Harvey P) Co

Quigley Co Inc 415 Madison Ave New York 17 NY
 Qujanda Tool Co Inc—see Collins Machinery Corp
 Qujanda Tool Div—see Collins Machinery Corp
 QUIK-HEAT—Clements Mfg Co
 QUIK-LABEL—Brady (W H) Co
 QUIK-LIFT—Coffing Hoist Div Duff-Norton Co
 QUIK-LOC—Joy Mfg Co
 QUIK-LOK—Eagle Electric Mfg Co Inc
 QUIK-PLATE—Brady (W H) Co
 QUIK-VAC—Clements Mfg Co
 QUIKHETER—Adam (Frank) Electric Co
 QUIKIT—Wells Mfg Corp
 QUIKLUG—Burndy Corp
 QUIKSITE—H-B Instrument Co
 Quincy Elevator Gate Co—see Quincy Mfg Co
 Quincy Mfg Co Box 916 Tiffin Ohio
 QUINORGO—Johns-Manville
 QUINTERRA—Johns-Manville
 QUINTERRABORD—Johns-Manville
 QWIK-CHANGE—Square D Co
 QWIK-OPEN—Square D Co

R

R-ASE—All-Steel Equipment Inc
 RABC—Reynolds Metals Co
 R-B-M Div Essex Wire Corp 131 Godfrey St
 Logansport Ind
 RCA—Radio Corp of America
 RCD—Rotary Concrete Drill Co
 RCS Tool Corp 227 E Front St (P O Box 661)
 Bloomington Ill
 RCS Tool Sales Corp—see RCS Tool Corp
 RE—Reuland Electric Co
 R & IE Equipment Div—see I-T-E Circuit Breaker Co
 R-K—Ruggles-Klingemann Mfg Co
 R/M—Raybestos-Manhattan Inc
 R & M—Robbins & Myers Inc
 R & M Hunter—see Hunter Div
 RS—River Smelting & Refining Co
 R/S—Refrigerating Specialties Co
 R T & E Co—see R T & E Corp
 R T & E Corp 1900 East North St Waukesha Wis
 Rab Electric Mfg Co Inc 605 E 132 St New York
 54 NY
 RABOLITE—Rab Electric Mfg Co Inc
 RACAL—Versen (Kurt) Co
 Racine Electric Products—see Howard Industries Inc
 RACO—All-Steel Equipment Inc
 RACOME—Versen (Kurt) Co
 RADARANGE—Raytheon Mfg Co
 RADECTOR—Jordan Electronics
 RADI-AIRE—Reynolds Electric Co
 Radiant Lamp Corp 300 Jelliff Ave Newark 8 NJ
 RADIANTGLASS—Allied Precision Industries
 RADIATSTAT—Ward Leonard Electric Co
 Radio Corp of America Industrial Electronic Products
 Front & Cooper Sts Camden 2 NJ
 Radio Frequency Laboratories Inc Boonton NJ
 Radio Receptor Co Inc 240 Wythe Ave Brooklyn 11
 NY
 RADIOCARB—Driver (Wilbur B) Co
 Radionic Transformer Co 411 S Sangamon St Chi-
 cago 7 Ill
 RADIX—Versen (Kurt) Co
 Radix Wire Co 26260 Lakeland Blvd Cleveland 32
 Ohio
 RADOR—Atlas Overhead Door Co
 Rae Motor Corp 2009 Kewaunee St Racine Wis
 RAILITE—Amplex Div Chrysler Corp
 RAINIER—American Crossarm & Conduit Div
 RAKIT—Coque (T J) Div Rome Cable Corp
 RALSCOPE—Waterman Products Co Inc
 Rakso Mfg Co 123-141 N Albany Ave Chicago 12
 Ill
 RAM—Diamond Expansion Bolt Co Inc
 RAMAC—Rattan Mfg Co
 Rambusch Decorating Co 40 W 13 St New York 11
 NY
 Ramco Mfg Co 540 Westfield Ave W Roselle Park
 NJ
 Ramco Mfg & Engineering 5413 N E Columbia Blvd
 Portland Ore
 Ramset Div—see Ramset Fastening System
 Ramset Fasteners Inc—see Ramset Fastening System
 Winchester-Western Div Olin Mathieson Chemical
 Corp
 Ramset Fastening System Winchester-Western Div
 Olin Mathieson Chemical Corp 12117 Berea Rd
 Cleveland 11 Ohio
 RANCH-ATE—Cool-ette Inc
 RANCH-VENT—Cool-ette Inc
 RANCHO—Western Insulated Wire Co
 RANCHO-PRENE—Western Insulated Wire Co
 Randall Granhite Bearings Inc Greenlawn & Lake Sts
 Lima Ohio
 RANGE LURS—Frankel Connector Co
 RANFER—Dav-Brite Lighting Inc
 RANGESPLICES—Frankel Connector Co
 RANGESTUD—Frankel Connector Co
 RANGETAP—Frankel Connector Co
 Rapid Electric Co 2881 Middletown Rd Bronx 61
 NY
 Rapid Electroplating Process Inc 1414 S Wabash Ave
 Chicago 5 Ill
 RATTLARM—Fischer & Porter Co
 RATTAN—Benjamin Electric Mfg Co
 Rattan Mfg Co 10 Wall St (P O Box 1745) New
 Haven 7 Conn
 Ratray (George) & Co 116-08 Myrtle Ave Richmond
 Hills 18 NY
 Rauland-Borg Corp 3535 West Addison St Chicago
 18 Ill

RAWL—Rawlplug Co Inc
 RAWLDRILL—Rawlplug Co Inc
 RAWLDRIVE—Rawlplug Co Inc
 Rawlplug Co Inc 212 Petersville Rd New Rochelle NY
 RAY-LINE—Portable Light Co Inc
 RAY-LINE—Sireno Co Inc
 RAY MAIN—Raybestos-Manhattan Inc
 RAY-O-MATIC—Electric Cord Co
 RAY-VEC—Electrend Products Corp
 Raybestos-Manhattan Inc 61 Willett St Passaic New Jersey
 Raydine Corp 2715 S Fourth St (P O Box 1147) Springfield Ill
 RAYESCENT—Westinghouse Electric Corp Lamp Div
 Raytheon Mfg Co Commercial Equipment Div 100 River St Waltham 54 Mass
 RE-CIRK-IT—Heineman Electric Co
 RE LON—Versen (Kurt) Co
 RE LUX—Versen (Kurt) Co
 REACTROL—General Electric Co
 REACTRON—Ward Leonard Electric Co
 Reading Chain & Block Corp—see Reading Crane & Hoist Corp
 Reading Crane & Hoist Corp 2100 Adams St Reading Pa
 Ready-Power Co 11231 Freud Ave Detroit 14 Mich
 REAIRE—Versen (Kurt) Co
 REALITE—Hoholane Co Inc
 REAM-RITE—Hohol Industries Inc
 RECO—Reynolds Electric Co
 Recora Co Inc Powis Rd (Box 68) St Charles Ill
 RECTI-FILTER—Raytheon Mfg Co
 RECTICHARGER—Raytheon Mfg Co
 RECTIRINGER—Raytheon Mfg Co
 RECTODYNE—Christie Electric Corp
 RECTOPOWER—Mallory (P R) & Co Inc
 RECTOX—Westinghouse Electric Corp
 RED ARROW—Lift Trucks Inc
 RED BAND—Howell Electric Motors Co
 RED CENTER—Klein (Mathias) & Sons
 RED "D"—Diamond Wire & Cable Co
 RED-D-PRENE—Diamond Wire & Cable Co
 RED DOT—Mason (L E) Co
 RED GIANT—Revolver Co
 RED HEAD—Blaco Mfg Co
 RED LUX—Duro-Test Corp
 Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio
 RED TOP—H B Instrument Co
 Redi-Bolt Inc 5334 Indianapolis Blvd East Chicago Ind
 REDI-FAB—Barber-Greene Co
 REDI-FLOW—Barber-Greene Co
 REDI-HEAT—Knapp-Monarch Co
 REDI-RODS—Redi-Bolt Inc
 Redmond Co Inc 201 Monroe St Owosso Mich
 REDONE—Versen (Kurt) Co
 REDUCO—Versen (Kurt) Co
 Reed Unit-Fans Inc 501 N St Patrick St New Orleans La
 REEL-O-MATIC—Columbia Products Inc
 REELIFT—Hykon Mfg Co
 REELITE—Appleton Electric Co
 Reeve Electrical Co Inc 120 W 42nd St New York 36 NY
 Reeve Electronics Inc 609 W Lake St Chicago 6 Ill
 REVELEC—Reeve Electronics Inc
 Reeves Pulley Co 1225 7th St Columbus Ind
 REFLEX—Versen (Kurt) Co
 REFRACTOLEN—Hoholane Co Inc
 Refrigerating Specialties Co 3004 W Lexington St Chicago 12 Ill
 REGAL-LITE—Kenworth Co
 REGATRON—Electronic Measurements Co Inc
 REGENT—Knox Electric Mfg Co
 REGENT—Miller Co
 REGONM—Electric Regulator Corp
 REGULA—Curtis Lighting Div Curtis-AllBrite Lighting Inc
 REGULFY—Allis-Chalmers Mfg Co
 REGULITE—Ward Leonard Electric Co
 REGUTRON—Electric Machinery Mfg Co
 Reichert Float and Mfg Co 2242 Smead Ave Toledo 6 Ohio
 REIGNSFAL—Peters Mfg Co
 REIGNSKIN—Peters Mfg Co
 REJUST—Versen (Kurt) Co
 RELAY-AMP—Goldfak Co Inc
 RELAYMATIC—Kellops Switchboard and Supply Co
 RELCTO—Appleton Electric Co
 RELENS—Versen (Kurt) Co
 RELIABLE—Standard Electric Co Inc
 Reliable Battery Co—see Standard Electric Co Inc
 RELIAMP—American Steel & Wire Div
 RELIANCE—Trine Mfg Corp
 Reliance Automatic Lighting Co 1927 Mead St Racine Wis
 Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio
 RELOID—Guardian Electric Mfg Co
 Relton Corp 99 N Lotus Ave Pasadena Calif
 REMCON—Pyramid Instrument Corp
 Remington Corp Remington Air Conditioning Div Willey St Auburn NY
 Remington Arms Co Inc 939 Barnum Ave Bridgeport 2 Conn
 REMOTROL—Midwest Electric Products Inc
 REMOTROL—Templeton Kenly & Co
 RENAISSANCE—Globe Lighting Products Inc
 REPAR—Versen (Kurt) Co
 Republic Crossting Co 1615 Merchants Bank Bldg Indianapolis 4 Ind
 Republic Steel Corp Steel and Tubes Div 224 E 131 St Cleveland 8 Ohio

RESISTOL—Collier Insulated Wire Co
 RESISTOYL—G & W Electric Specialty Co
 RESPOT—Versen (Kurt) Co
 RETRACT-O-REEL—Appleton Electric Co
 Reuland Electric Co 3001 W Mission Rd Alhambra Calif
 Revere Copper & Brass Inc 230 Park Ave N Y 17 NY
 Revere Electric Mfg Co 7420 N Lehigh Ave Chicago 48 Ill
 REVMASTER—Opad Electric Co
 Revolver Co 2000 86th St North Bergen NJ
 REVOLVO—Frick-Gallagher Mfg Co
 REVOLVO RAY—Sireno Co Inc
 REVUE—Versen (Kurt) Co
 REX—Air Controls Inc
 REX—Chain Belt Co
 REX—Peer Inc
 REX-AIRATE—Air Controls Inc
 Rex Metal Craft Inc 1717 Gent St Indianapolis 2 Ind
 REX-TUBE—Flexonics Corp
 Rex Welder Co 1200 Milton St Benton Harbor Mich
 Rex Welder Sale Co—see Universal Electric Sales Corp
 REXSELEN—Knapp Inc
 Reynolds Electric Co 3000 River Rd River Grove Ill
 Reynolds Metals Co Richmond 18 Va
 Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI
 Rhodes (M H) Inc 30 Bartholomew Ave Hartford 6 Conn
 Rich (Phil) Fan Mfg Co Inc 2900 Caroline Houston 4 Texas
 Rich Lamp Mfg Co—see Stabrite Fluorescent Mfg Co
 Richards (J R) Co P O Box 482 Carnegie Pa
 Richards Mfg Co Ltd 25 Rankin St Newark 3 New Jersey
 Richards-Wilcox Mfg Co 150 Third St Aurora Ill
 Richardson-Allen Corp 116-15 Fifteenth Ave College Point L I NY
 RICHMOND—Miller Co
 Ridge Tool Co 400 Clark St Elyria Ohio
 RIDGID—Ridge Tool Co
 RIDGOLB—Ridge Tool Co
 Rieber (Frank) Inc—see Caltron Products Co
 RIMSET—Penn Controls Inc
 RINGCALL—Edwards Co Inc
 Ringsdorf Carbon Corp Box 22 East McKeesport Pa
 RIPPLEX—Hatfield Wire & Cable Div
 Ripley Co Inc Factory St Middletown Conn
 RISERTHERM—Mercoird Corp
 RITEOHM—Ohmite Mfg Co
 RITEWAY—Building Service Co
 Rittenhouse Co Inc East St Honeoye Falls NY
 River Smelting & Refining Co 4195 Bradley Rd (P O Box 5755) Cleveland 1 Ohio
 Riverside Mfg & Electrical Supply Co 10228 Michigan Ave Dearborn Mich
 RO-LITE—Curtis Lighting Div
 Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio
 Robbins & Myers Inc Fan Div—see Hunter Div
 Roberson (L N) Co—see Roberson Inc
 Roberson Inc 1539 E 103 St Seattle 55 Wash
 ROBERTA—House-O-Lite Corp
 Robertson & Ruth 460 W Lake St Elmhurst Ill
 Robertson Transformer Co Thornton Road Blue Island Ill
 ROBINTRONIC—Hewitt-Robins Inc
 ROBOT—Miller Harris Instrument Co
 Robot Appliances Inc—see Robot Industries Inc
 ROBOT-EYE—Heat Timer Corp
 Robot Industries Inc 7041 Orchard St Dearborn Mich
 ROBOTROL—Reliance Automatic Lighting Co
 Robotron Corp 21300 W Eight Mile Rd Detroit 19 Mich
 ROCK BRAND—Weiss & Biheller Merchandise Corp
 Rockbestos Products Corp Nicoll and Canner Sts New Haven 4 Conn
 ROCKER-GLD—Pass & Seymour Inc
 Rocket Devices Corp—see Star Expansion
 Rocket Distributors Inc—see North Shore Nameplate Inc
 ROCKING CONTACT—Allis-Chalmers Mfg Co
 Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa
 RODAR—Driver (Wilbur B) Co
 ROE PLASTIC—Roebing's (John A) Sons Corp
 Roebing's (John A) Sons Corp 640 S Broad St Trenton 2 NJ
 ROEBX—Roebing's (John A) Sons Corp
 ROELAMP—Roebing's (John A) Sons Corp
 ROELAMP—Roebing's (John A) Sons Corp
 ROECORD—Roebing's (John A) Sons Corp
 ROECOZONE—Roebing's (John A) Sons Corp
 ROELAS—Roebing's (John A) Sons Corp
 ROEPRENE—Roebing's (John A) Sons Corp
 ROESHEATH—Roebing's (John A) Sons Corp
 ROETEMP—Roebing's (John A) Sons Corp
 ROEVAR—Roebing's (John A) Sons Corp
 ROEWELD—Roebing's (John A) Sons Corp
 ROFLUX—Rome Cable Corp
 Rogers Electric Laboratories Inc 2651 Shaker Rd Cleveland Hts 18 Ohio
 Rol-Away Truck Co—see Rol-Away Truck Mfg Co Inc
 Rol-Away Truck Mfg Co Inc 6143 S E Foster Rd Portland 6 Ore
 ROL-TOE—Templeton Kenly & Co
 ROLARC—Federal Pacific Electric Co
 ROLENE—Rome Cable Corp
 Roll-A-Reel Co 4630 Reading Rd Cincinnati 29 Ohio

Roller (Wm G) Inc 159 Liberty Ave Miesola NY
 Roller-Smith Corp—see Federal Pacific Electric Co
 Roller-Smith Inc—see Federal Pacific Electric Co
 ROLLERREEL—Suttle Equipment Co
 ROLLO-COLOR—Luxor Lighting Products Inc
 ROLON—Rome Cable Corp
 ROMARINE—Rome Cable Corp
 Rome Cable Corp 421 Ridge St Rome NY
 ROME-RIGID—Rome Cable Corp
 ROMEX—General Cable Corp
 POPRENE—Rome Cable Corp
 ROSEAL—Rome Cable Corp
 ROSINX—Dunton (MW) Co
 Rostan Corp 5660 59th St Macbeth 78 LI NY
 ROTABIN—Frick-Gallagher Mfg Co
 Rotary Concrete Drill Co 650 S Arroyo Parkway Pasadena 1 Calif
 Roth Mfg Co 6420 W Howard St Chicago 31 Ill
 Roto-Beam 1755-57 N Keeler Ave Chicago 39 Ill
 ROTO-BIN-DICATOR—Bin Dicator Co
 ROTO-GLO—Pass & Seymour Inc
 ROTO-MARKER—Acromark Inc
 ROTO-PUSH—Cutler Hammer Inc
 ROTO-STACKEE—Crane Veyor Corp
 ROTO STRIP—Neo-Ray Products Inc
 ROTO TORR—Haydon (A W) Co
 ROTO TROL—Healy-Ruff Co
 ROTOBELM—General Lighting Co
 ROTOLECTOR—Kliegl Bros Universal Electric Stage Lighting Co Inc
 ROTOMOTIVE—Jack & Heintz Inc
 ROTOSPOT—Rambusch Decorating Co
 ROTOTROL—Westinghouse Electric Corp
 ROTRWIST—Star Expansion
 Round (David) & Son Inc Box 883 Cleveland 22 Ohio
 ROUND WOUND—Line Material Industries
 ROV-A-LITE—Terado Co
 ROVAL—Waveland Electric Co
 Royal Electric Co Inc—see Royal Electric Corp
 Royal Electric Corp 95 Grand Ave Pawtucket RI
 Royal Electric Mfg Co 1122 E 87 St Chicago 19 Ill
 ROYAL-LAG—Royal Electric Corp
 ROYAL-NOARK—Royal Electric Corp
 ROYALMATIC—Standard Electric Time Co
 ROYALOG—Royal Electric Corp
 ROYALOK—Royal Electric Corp
 ROZONE—Rome Cable Corp
 RUBBER COAT—Wilbur & Williams Co
 RUBBON SOLDER—All-State Welding Alloys Co Inc
 Ruberoid Co 500 Fifth Ave New York 36 NY
 RUBRES—Co-operative Utilities Co Inc
 RUBRITE—Co-operative Utilities Co Inc
 Ruby Chemical Co 68-70 McDowell St (P O Box 1108) Columbus 16 Ohio
 Ruby Lighting Corp—see Lighting Dynamics Inc
 Ruby-Phillite Corp 32-02 Queens Blvd Long Island City 1 NY
 RUBYFLEX—Ruby Chemical Co
 RUCCO—Ruby Chemical Co
 RUGGEDIZED—Marion Electrical Instrument Co
 Rugoles-Klingemann Mfg Co Foster Court Salem Mass
 RUINABOUT—Barber-Greene Co
 RUPTAIR—Allis-Chalmers Mfg Co
 RUPTOR—Allis-Chalmers Mfg Co
 RUR-A-LINE—Plastic Wire & Cable Corp
 Rural Transformer & Equipment Co—see R T & E Corp
 RURALALY—General Cable Corp
 Rusreen Mfg Co 14262 Birwood Ave Detroit 38 Mich
 Rush Wire Stripper Div Eraser Co Inc 1068 S Clifton St Syracuse 4 NY
 Russell & Stoll Co Inc 125 Barclay St N Y 7 NY
 RUST BOND—Carbolite Co
 Rust-Olenm Corp 2425 Oakton St Evanston Ill
 RUST SHIELD—Wilbur & Williams Co
 RUSTICLITE—Gruber Bros Inc
 Ryther Purdy Lumber Co Inc 501 Tiffany St New York 59 NY

S

S & C Electric Co 4435 Ravenswood Ave Chicago 40 Ill
 SCBCO—Southern Carbon Brush Co Inc
 SCP—Superior Carbon Products Co
 SCR DIMMER—Kliegl Bros Universal Electric Stage Lighting Co Inc
 S T—Superior Insulating Tape Co
 STE—Southwestern Industrial Electronics Co
 SKF Industries Inc Front St & Erie Ave Phila 32 Pa
 S & M—Starrett (L S) Co
 SMC—St Marys Carbon Co
 SPCO—Superior Porcelain Co
 S & R—Sherman & Reilly Inc
 SVEA—Swedish Iron & Steel Corp
 SA-FISE—Electric Machinery Mfg Co
 SABER-TOOTH—Rawlplug Co Inc
 SABRE—Miller Co
 SAF-FLEX—Starrett (L S) Co
 SAF-T-AIR—United Electric Motor Co
 SAF-T-ARC—Russell & Stoll Co Inc
 SAF-T-LOK—Bell Electric Co
 SAFA Alarm Div Inc Fyr-Fyter Co P O Box 1118 Newark NJ
 SAFARI—Benjamin Electric Mfg Co
 SAFE-FLEX—Starrett (L S) Co

SAFT-T-BEAM—Westinghouse Electric Corp Lamp Div
SAFE-T-CLIP—Industrial Devices Inc
SAFE-T-KOOL—Active Specialty Co
SAFE-T-GLOW—Brady Mfg Co
SAFE-T-SEALS—Miserer Mfg Co Inc
SAFE-T-TAP—Keystone Mfg Co
SAFECOTE—Roebbling's (John A) Sons Corp
SAFETECH—Capwell Mfg Co
Safety Belt-Lacer Co—see Armstrong-Bray & Co
SAFETY-GLO—Redale Mfg Co Inc
Safety Live Line Tool Co 973 86th Ave Oakland 21 Calif
SAFETY MI—General Cable Corp
SAFETY PULL—Coffing Hoist Div
SAFETY-VALVE—Bussmann Mfg Div
SAFETY YELLOW—Woodhead (Daniel) Co
SAFEWAY—American Pulley Co
SAFEWAY—Safety Live Line Tool Co
SAFEWAY—Woodhead (Daniel) Co
SAFEWAY—Wright Hoist Div
Safety Heat Elements Inc Newfield St (P O Box 1109) Middletown Conn
SAFLUX—Square D Co
SAFLOX—Benjamin Electric Mfg Co
SAFPATCH—Kiehl Bros
SAFREED—Duro-Test Corp
SAFRONT—Square D Co
SAFTST—Fleron (M M) & Son
SAFWAY-ALDEK—Safway Steel Products Inc
Safway Steel Products Inc 6234 W State St Milwaukee 13 Wis
St Louis Brass Co—see Guth (Edwin F) Co
St Louis Malleable Casting Co 7701 N Conduit Ave St Louis 15 Mo
St Marys Carbon Co State St St Marys Pa
Salem Tool Co 767 S Ellsworth Ave Salem Ohio
SALI—Adalat Mfg Co
Salton Mfg Co Inc 312 E 95 St New York 28 NY
SAMSON—Metalcraft Products Co Inc
SAND-SCOTT—Holub Industries Inc
Sangamo Electric Co 11th & Converse Springfield Ill
Sargent Electric Corp 630 Merrick Rd Lynbrook NY
Sasgen Derrick Co 3101 Grand Ave Chicago Ill
SAT-O-LITE—House-O-Lite Corp
SATELLUME—Ainsworth Lighting Inc
Sawelens Cements Co 1045 N Canal St Pittsburgh 15 Pa
Save Lamp Co—see Penetrax Corp
SAW-GUN—Mid-States Welder Mfg Co
SAWZALL—Milwaukee Electric Tool Corp
SAXON—Benjamin Electric Mfg Co
Saxony Ceramics P O Box 157 Saxonyburg Pa
Saylor Electric Products Corp 277 Pierce St Birmingham Mich
SAYLORDUCT—Saylor Electric Products Corp
Scam Instrument Corp 1811 W Irving Rd Chicago 13 Ill
Schauer Machine Co—see Schauer Mfg Corp
Schauer Mfg Corp 4500 Alpine Ave Rossmore Ohio
Schemmady Varnish Co Inc Congress & 9th Sts Schenectady 1 NY
SCHOOLMASTER—Great Northern Mfg Corp
Schwelter & Conrad Inc—see S & C Electric Co
Schlasy Bros Inc 4915 W 67 St Chicago 38 Ill
Scientific Electric Inc 105-109 Monroe St Garfield NJ
SCINTAGUN—Goldak Co Inc
SCOOT-LITE—Woodward Machine Co
SCOPE—Stromberg Time Corp
SCOTCH—Minnesota Mining & Mfg Co
SCOTCHCAST—Minnesota Mining & Mfg Co
SCOTCHCOTE—Minnesota Mining & Mfg Co
SCOTCHFIL—Minnesota Mining & Mfg Co
SCOTCHLOK—Minnesota Mining & Mfg Co
Scott (H H) Inc 111 Powder Mill Rd Maynard Mass
Scott (Harmon Houser) Inc—see Scott (H H) Inc
SCOTTY—Shure Mfg Corp
Scranton Aluminum Mfg Co 419 S Wyoming Ave Scranton Pa
Scranton Cellomatic Battery Corp—see Scranton Storage Battery Corp
Scranton Storage Battery Corp Archbald Pa
Scrayco Level Controls—see Scrayco Mfg Co
Scrayco Mfg Co 201 Greene Ave Middlesex NJ
SCRUTS—Solar Electric Corp
SCRUT-LEADS—Rawplug Co Inc
SCRUT-TITE—Mastercraft Plastics Co Inc
Scroggs (Lloyd Co)—see Howard Industries Inc
SCRUIN—Star Expansion
SCRULUC—Bundy Corp
SCULPTURAMA—Sunbeam Lighting Co
SEA BREEZE—Emerson Electric Mfg Co
Seaboard Products Corp Electric Heating Div 191 Frelinghuysen Ave Newark NJ
Seeger Standard Carbon Co 291 Church St New York 13 NY
SEAL THRU—Eliza Metal Products Co
SEALED TIGHT—Royal Electric Corp
SEALFLEX—Universal Metal Hose Co
SEALNUT—Radio Frequency Laboratories Inc
SEALSTIX—Central Scientific Co
SEALTITE—Anaconda Metal Hose Div
SECONEC—Rusgreen Mfg Co
SECOVAR—Sangamo Electric Co
SECURITY—United States Rubber Co
Security Insert Co 1300 Arch St Phila 7 Pa
Security Lightning Rod Co—see Security Mfg & Contracting Co
Security Mfg & Contracting Co 606-612 Pine St Burlington Wis

SECURITYFLEX—Anaconda Wire & Cable Co
SEECO—Southern Electrical Equipment Co
Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn
SEEL SKREWS—Automatic & Precision Mfg Co
SEELUX—Guth (Edwin F) Co
Seely Instrument Co Inc 377 Fourth St (P O Box 387) Niagara Falls NY
Seigl (L J) Co 2500 W North Ave Chicago 47 Ill
SELCO—Seil (H H) Electric Co
SELCO—Spies Electric Works
SELECT-A-SPEDE—Allis (Louis) Co
SELECTROL—Electro Dynamic Div General Dynamics Corp
SELECTRON—Electro Dynamic Div General Dynamics Corp
SELEKTA—Associated American Winding Mach Inc
SELENIBRAKE—American Rectifier Corp
SELENICHARGER—American Rectifier Corp
SELENIFIER—American Rectifier Corp
SELETRON—Radio Receptor Co Inc
SELF-CHECKING—Sensitive Research Instrument Corp
Self-Lifting Piano Truck Co 423 N Main St Findlay Ohio
SELFDRIIL—Star Expansion
SELFUBE—Keystone Carbon Co Inc
Sell (H H) Electric Co 3240 Dakota Ave Minneapolis 16 Minn
SELPO—Self-Lifting Piano Truck Co
SENIOR—Linemaster Switch Corp
Sensitive Research Instrument Corp 310 Main St New Rochelle NY
SENSITROL—Weston Instruments
SENTINEL—Cincinnati Time Recorder Co
SENTINEL—Elenco Inc
SENTINEL—Photobell Co Inc
SENTINEL—Portable Light Co Inc
SENTRY—Sentry-Lite & Battery Div Hobby & Brown Electronic Corp
Sentry-Lite & Battery Div Hobby & Brown Electronic Corp 237 Sunrise Highway Rockville Centre NY
SEPCO—Steel Electric Products Co Inc
SEPRABLE—Applintex Electric Co
SEQUENSTART—Sola Electric Co
Sequoia Process Corp—see Sequoia Wire & Cable Co
Sequoia Wire & Cable Co 2201 Bay Rd (P O Box 1007) Redwood City Calif
SERV-EN—Kearney (James R) Corp
SERVICE BUGS—Frankel Connector Co
SERVICE LITER—Revere Electric Mfg Co
SERVICE-MASTER—McCabe-Powers Body Co
SERVICEMAN—Marsh (Jas P) Corp
SERVICESPOOL—Alpha Wire Corp
SERVISAFE—Thompson Electric Co
SERVISLEE—Hubbard & Co
SERVIT—Burdny Corp
Servospeed Div Electro Devices Inc 4 Godwin Ave Paterson NJ
Seton Name Plate Co 431 W Rock Ave New Haven 15 Conn
SHAFTMOUNT—U S Electrical Motors Inc
Shalda Mfg Co Inc 156 W Providencia Ave Burbank Calif
Shallcross Controls Inc 2217-21 N 31 St Milwaukee 8 Wis
Shallcross Mfg Co Preston St Selma NC
SHALLORAMA—Sunbeam Lighting Co
Shaw-Box Crane & Hoist Div Manning Maxwell & Moore Inc Muskegon Mich
Shaw-Perkins Mfg Co 201 E Carson St Pittsburgh 19 Pa
SHAWMUT—Chase-Shawmut Co
SHEETFLEXFOS—Keasbey & Mattison Co
Shelby Electric Inc East US Highway # 421 Shelbyville Ind
Shenango Furnace Co Centrifugally Cast Products Div West Third St Dover Ohio
Shenango Penn Mold Co—see Shenango Furnace Co
Sherman & Co—see American Silver Co Inc
Sherman Industrial Electronics Div of Engineering Design Inc 108 N Gill St State College Pa
Sherman (H B) Mfg Co 22 Barney Battle Creek Mich
Sherman & Reilly Inc 1 Broad St Chattanooga 2 Tenn
Sherwin-Williams Co 101 Prospect Ave NW Cleveland 1 Ohio
SHIELD-ARC—Lincoln Electric Co
SHIPMASTER—Lewis-Shepard Products Inc
Shock-Rite Electric Fence Co—Electric Service Systems Inc
SHOCK-STOPS—Connecticut Hard Rubber Co
SHOCK-ABSORBER—Royal Electric Corp
SHOK FENCE—International Electric Fence Co Inc
SHOK-PRUF—Cable Electric Products Inc
SHOKLESS—Kneisley Electric Co
SHOP-CADDY—Allied Mfg & Sales Co
SHOP KING—Precision Welder Mfg Co
SHOPLIFTER—Economy Engineering Co
Shox-Stok Inc Wellington Ohio
Shrader (FW) Co 11623 S Broadway Los Angeles 61 Calif
Shreveport Engineering Co—see Bar-Brook Mfg Co Inc
SHUR-MOUNT—Swivelco Co Inc
Shure Mfg Corp 1601 S Hanley Rd St Louis Mo
SHURE SET—Ramset Fastening System
SHURFLO—Anchor Metal Co Inc
Shurite Meters 130 Wallace St New Haven 8 Conn
SHURLOK—Pass & Seymour Inc
SHUT-O-VENT—Reed Unit-Fans Inc
SHUTBRACK—Adam (Frank) Electric Co
SIANOR—Pucel Enterprises Inc
SIDALARM—Newark District Telegraph Co
Siebring Mfg Co George Iowa

SIECO—Sherman Industrial Electronics Div
SIEMARC—Southwestern Industrial Electronics Co
Sierra Electric Corp 15100 S Figueroa Gardens Calif
Sierra Electric & Mfg Co—see Sierra Electric Corp
SIERRA-TRIPLEX—Sierra Electric Corp
SIERRALITE—Sierra Electric Corp
SIERRAPLEX—Sierra Electric Corp
SIERRAWIRE—Sierra Electric Corp
SIGHTLINE—Sunbeam Lighting Co
SIGHTMASTER—Art Specialty Co
SIGHTMASTER—Flexo International Corp
SIGHTTRON—Lightolier Inc
SIGMA—Wakefield Co
SIGMA-GLOW—Industrial Development Labs Inc
Signal Electric Div King-Seely Corp 1800 13th St Menominee Mich
Signal Electric Mfg Co—see Signal Electric Div
Signal Engineering & Mfg Co—see Wheelock Signals Inc
SIGNAL MAT—Patrick & Wilkins Co
Signalite Fuse Co—see Signalite Inc
Signalite Inc 37-41 Neptune Highway Neptune NJ
Signal Controls 3205 S E 13th Ave Portland 2 Ore
SIL-BES—Electro-Technical Products Div
SILASTIC—Dow Corning Corp
SILCAD—Yardney Electric Corp
SILCOBEST—Silicone Insulation Inc
SILCONIC—Gould-National Batteries Inc
SILENT BREEZE—Meier Electric & Machine Co Inc
Silent Hoist & Crane Co 841-63rd St Brooklyn 20 NY
SILENT-KING—Cable Electric Products Inc
SILENTUANE—Westinghouse Electric Corp Sturtevant Div
SILIC-O-NETIC—Heinemann Electric Co
Silicone Insulation Inc 1383 Seabury Ave Bronx 61 NY
SILCONIC—Willard Storage Battery Div
SILOTEX—Anaconda Wire & Cable Co
SILTUBE—All-State Welding Alloys Co Inc
SILV-A-FLEX—Plastic Wire & Cable Corp
SILVER BEAUTY—Triple-A Specialty Co
SILVER DOT—Silway Lighting Inc
SILVER KING—Arro Expansion Bolt Co
SILVER KING—General Control Co
SILVER LABEL—Duntun (MW) Co
SILVER SPOT—Silway Lighting Inc
SILVERCEL—Yardney Electric Corp
SILVERLINE—Thor Power Tool Co
SILVERLINER—Westinghouse Electric Corp
Silvey Pipe Bender Co 2215 Brighton Ave Kansas City 27 Mo
Silway Lighting Inc 100 W Main St Bound Brook NJ
SIMCONEX—Simplex Wire & Cable Co
Simco Co Inc 114 15th Ave College Point LI NY
Simmonds Accessories Inc Tarrytown NY
Simmons Saw and Steel Co 470 Main St Fitchburg Mass
Simonski (G S) Co—see Lucifer Furnaces Inc
Simplet Electric Co—see Ideal-Simplet Fittings Inc
SIMPLEX—Templeton Kenly & Co
SIMPLEX—Weiss & Biheller Merchandise Corp
Simplex Co Inc 1139-41 N MacArthur Blvd Springfield Ill
Simplex Time Recorder Co 24 S Lincoln St Gardner Mass
Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass
SIMPLYTROL—Assembly Products Inc
Simpson Co 1060 E 11 St Oakland 6 Calif
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill
Simpson (Mark) Mfg Co Inc 32-28 49th St Lonn Island City 3 NY
Simpson Screen Co—see Simpson Co
SIQUX—Albertson & Co Inc
SIRENO—Portable Light Co Inc
Sireno Co Inc 214 William St New York 38 NY
SISCO—Swedish Iron & Steel Corp
Sittler Corp 18 N Ada St Chicago 7 Ill
SKANDIA—Eagle Mfg Co
SKEDDODLE—Reynolds Electric Co
Skil Corp 5033 Elston Ave Chicago 30 Ill
SKILDRILL—Shallcross Controls Inc
SKILSAW—Shallcross Controls Inc
SKILSAW—Skil Corp
Skinner Chuck Co Skinner Electric Valve Div 95 Edgewood Ave New Britain Conn
SKIP TOOTH—Nye Tool Co
SKULLGARD—Mine Safety Appliances Co
SKY-BLAST—Robbins & Myers Inc
SKY-GLO—Benjamin Electric Mfg Co
SKY/LUME—Electro Lighting Corp
SKY-LUX—Curtis Lighting Div Curtis-Albrite Lighting Inc
SKY-RIDE—Allied Mfg & Sales Co
SKY-TIE—Adalat Mfg Co
SKY-VENT—Buffalo Forge Co
SKYCEIL—Silway Lighting Inc
SKYDOME—Nemco Electric Co
SKYLIFT—Automatic Transportation Co
SKYLINE—Silway Lighting Inc
SKYLINE—Arec Co
SKYLINE—Electro Lighting Corp
SKYLOVER—Electro Lighting Corp
SKYRAY—Electro Lighting Corp
SKYSECTOR—Silway Lighting Inc
Skyworker Corp—see Emhart Mfg Co
Slater Appliances Inc—see Slater Electric & Mfg Co Inc
Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY
Slaughter Co College & Young Sts Piqua 5 Ohio

SLEIGH-O-LITE—Cable Electric Products Inc
SLIMFIN—Tuttle & Kift Inc
SLIMLUX—Guth (Edwin F) Co
SKIPPNOT—Plymouth Rubber Co Inc
SLO-LAG—Eagle Electric Mfg Co Inc
SLO-SPEED—Sterling Electric Motors Inc
SLO-SPIRAL—New England Carbide Tool Co Inc
SLO-SYN—Superior Electric Co
Sloane Mfg Co 7606 N Clybourn Ave Sun Valley
Calif
SLUGIM—Star Expansion
SLUMBER GLO—Rudale Mfg Co Inc
SLYVER—C & D Batteries Inc
Small Motors Inc 2076 Elston Ave Chicago 14 III
SMALL TALK—Simpson (Mark) Mfg Co Inc
SMASON—Couch (SH) Co Inc
SMITH DOLAND—Electric Arc Inc
Smith & Dove Mfg Co—see Lidlow Mfg & Sales Co
Smith-Gates Corp Farmington Conn
Smith (F A) Mfg Co—see Fasco Industries
Smith Welding Equipment Corp 2633 4th St S E
Minneapolis 14 Minn
Smithcraft Lighting 217 Everett Ave Chelsea 50
Mass
SMOKE-EYE—Heat Timer Corp
Smoot-Holman Co 321 N Eucalyptus Ave (P O Box
4097) Inglewood Calif
SMOOTH JAW—Champion DeArment Tool Co
SNAKE CHARMER—Barth Corp
SNAKE LEADER—Burbank Electrical Products
SNAP-ACTION—Buckman Electrical Products Corp
SNAP-IN—Reicher Float & Mfg Co
SNAP-LOCK—National Acme Co
Snap-on-Tools Corp 8028 28th Ave Kenosha Wis
SNAP-STRAPS—Blackhawk Industries
SNAPEE—Woodhead (Daniel) Co
SNAPICOLL—Wiremold Co
SNAPIN—Star Expansion
SNAPIT—Cable Electric Products Inc
SNO-FLAKE—Curtis Lighting Div Curtis-AilBrite
Lighting Inc
SNORKEL—Nemco Electric Co
SNOWLITE—Luxor Lighting Products Inc
SNUG-SEAT—Anderson Electric Corp
SNUGFIT—Paine Co
Snyder (M L) & Son Inc 1897 E York St Phila-
delphia 25 Pa
So-Cal Electro Products Inc 4423 W Jefferson Blvd
Los Angeles 16 Calif
Soapstone Co—see Soapstone Duct Co
Soapstone Duct Co 3985 Beach St Oakland Calif
SOCKET CINCER—Kees (F D) Mfg Co
SODERTITE—G & W Electric Specialty Co
Sola Electric Co 4633 W 16th St Chicago 50 III
Solar Electric Corp 121 Central Ave Warren Pa
Solar Light Mfg Co 400 North Ashland Chicago 22
III
SOLARITE—Solar Light Mfg Co
SOLAVOLT—Sola Electric Co
SOLDERALL—Brach Mfg Co
SOLDEREZE—Phelps Dodge Copper Products Corp
SOLDERMASTER—Hexacon Electric Co
SOLDERUX—Mico Instrument Co
SOLLITE—Westinghouse Electric Corp Lighting Div
Solus Corp 58-17 28th Ave Woodside 77 L I NY
SOLVO-STAT—Hoyt Mfg Corp
Sonotone Corp Battery Div Elmsford NY
Soreng Div—see Controls Co of America
Sorensen & Co Inc Richards Ave South Norwalk Conn
Sorgel Electric Co 8388 W National Ave Milwaukee
4 Wis
Sorgel Transformer Co—see Sorgel Electric Co
Sound Equipment Corp—see Kwikheat Mfg Co
SOUND GUARD—Progress Mfg Co Inc
South River Metal Products Co Inc 377 Turnpike
South River NJ
Southco Div South Chester Corp Lester Pa
Southeast Lighting Inc 521 E 20 St Charlotte 1
N C
Southern Carbon Brush Co Inc #7-18th St S W
(P O Box 1710) Birmingham 8 Ala
Southern Electrical Equipment Co 308 W Bland at
Mint St Charlotte 3 N C
Southwestern Industrial Electronics Co 2831 Post Oak
Rd (P O Box 13058) Houston 19 Tex
Southwire Co Carrollton Ga
SOVEREIGN—Miller Co
SPACE LITER—Sun-Lite Mfg Co
SPACE SAVER—Hyster Co
SPACEGRID—Ainsworth Lighting Inc
SPACELITER—Stebor Mfg Co
SPACEMASTER—Lewis-Shepard Products Inc
SPACIALITE—Ainsworth Lighting Inc
Spang-Chalfant Div—see National Supply Co
SPAIG—National Supply Co
SPANGLEAM—National Supply Co
SPANTAP—Burndy Corp
SPATIALITE—Manning (R A) Co Inc
SPATTERPROOF—Radiant Lamp Corp
Spaulding Fibre Co Inc 310 Wheeler St Tonawanda
NY
SPAULDITE—Spaulding Fibre Co Inc
SPAULDO—Spaulding Fibre Co Inc
SPEAR—Jordan Co
Specialties Inc 2936 Sacramento St Pittsburgh 4
Pa
SPECTROLUX—Luxor Lighting Products Inc
SPEED-O-MATIC—Beaver Pipe Tools Inc
SPEED-LINE—Garcy Lighting Div Garden City Plating
& Mfg Co
SPEED-LOK—Cable Electric Products Inc
SPEED SPIRAL—Super Tool Co
SPEED THRU—Mercury Hydraulics Inc
SPEED-TROL—Sterling Electric Motors Inc

SPEEDAIRE—Dayton Electric Mfg Co
SPEEDEX—General Cement Mfg Co
Speedex Mfg Co 418 S Wyman St Rockford III
SPEEDLOCK—Waco Mfg Co
SPEEDMASTER—Accurate Engineering Co
SPEEDMASTER—Lewis-Shepard Products Inc
SPEEDMOUNT—Bell Electric Co
SPEEDOLET—Killark Electric Mfg Co
SPEEDOMAX—Leeds & Northrup Co
SPEEDRANGES—Master Electric Div Reliance Electric
& Engineering Co
SPEEDSAW—Thor Power Tool Co
SPEEDSET—Waco Mfg Co
SPEEDTOOLS—Thor Power Tool Co
SPEEDWAY—Wright Hoist Div
SPEEDWIRE—Slater Electric & Mfg Co Inc
SPEEDY-CAL—North Shore Nameplate Inc
SPEER-MARK—North Shore Nameplate Inc
Spencer Industries 1508 N Mascher St Phila 2 Pa
Spencer Studios—see Spencer Industries
Spencer Thermostat Div—see Metals & Controls Div
Spencer Turbine Co 486 New Park Ave Hartford 6
Conn
Sperri Electric Corp 20500 St Clair Ave Cleveland
17 Ohio
Sperto Faraday Inc 1322 E Church St Adrian Mich
SPHERE—Versen (Kurt) Co
SPHEROLITE—Line Material Industries
Spies Electric Works 564 W Van Buren St Chicago
7 III
SPINFAST—Scranton Storage Battery Corp
SPIRAFIL—Phelps Dodge Copper Products Corp
SPIRAFLEX—General Insulated Wire Works Inc
SPIRAKORE—General Electric Co
SPIRAL-DRIVE—Arro Expansion Bolt Co
SPIRAL WRAP—Ilumitron Engineering
SPIRALOK—American Metal Moulding Co
SPIRALON—Supernat Mfg Co
SPIRO-DUCT—Fairbanks Morse & Co
SPILAC—Westline Products Div Western Lithograph Co
SPILCE CAPS—Buchanan Electrical Products Corp
SPOOLAPC—All-State Welding Alloys Co Inc
SPORTLITE—Duro-Test Corp
SPORTO—Appleton Electric Co
SPORTSLITER—Stebor Mfg Co
SPOTTY—Curtis Lighting Div Curtis-AilBrite Light-
ing Inc
SPRA-MASK—Mystik Adhesive Products Inc
Sprague Electric Co North Adams Mass
Sprague Specialties Co—see Sprague Electric Co
SPRAYLITE—Silveray Lighting Inc
SPRAYO X—Preformed Products Co
SPRING-A-LITE—Joy Mfg Co
Spring City Electrical Mfg Co Spring City 85 Pa
Spring City Foundry Co—see Spring City Electrical Mfg
Co
Spring Load Mfg Corp 6332 Maynard Ave Seattle
WA
SPRING-O-MATIC—Industrial Electrical Works
SPRING-TITE—U S Expansion Bolt Co
SPRING WING—Paine Co
SPRING WINGS—Rawplug Co Inc
SPRINGIN—Star Expansion
Square D Co 6060 Rivard St Detroit 11 Mich
SQUARE DUCT—Square D Co
SQUEEZON—Kearney (James R) Corp
STA-KON—Thomas & Betts Co
Sta-Rite Electric Products Co—see Stabrite Fluores-
cent Mfg Co
Sta-Tite Mfg Co 2000 Wyandotte Kansas City 8
Missouri
Sta-Warm Electric Co 53 N Chestnut St Ravenna
Ohio
STAB-LOK—Federal Pacific Electric Co
STABIL-GLOW—Blue M Electric Co
STABIL-THERM—Blue M Electric Co
STABLINE—Superior Electric Co
STABBREAKER—Federal Pacific Electric Co
Stabrite Fluorescent Mfg Co 3550 Northwest 49 St
Miami Fla
Stackpole Carbon Co Stackpole St St Marys Pa
Stahl Metal Products Inc 3490 W 140 St Cleveland
11 Ohio
STAIRCART—O'Neil-Irwin Mfg Co
STAIRMASTER—Fairbanks Co
STAKLITE—Appleton Electric Co
STALEY—Electric Switch Corp
Stamford Lighting—Stamford Metal Specialty Co Inc
Stamford Metal Specialty Co Inc 429 W Broadway
NY 12 NY
Stanat Mfg Co Inc 524 Shames Dr Westbury NY
Stanat Tool & Machine Co—see Stanat Mfg Co Inc
STANDARD—Circle F Mfg Co
Standard Electric Co Inc P O Box 6356 San Antonio
12 Tex
Standard Electric Div Standard Dayton Corp P O Box
1001 Dayton 1 Ohio
Standard Electric Mfg Co Inc Haddon Ave West Ber-
lin NJ
Standard Electric Time Co 89 Logan St Springfield
2 Mass
Standard Electrical Products Co 2240 E Third St
Dayton 3 Ohio
Standard Portable Cord Co Inc Mayville NY
Standard Transformer Co 140 Dana St N E Warren
Ohio
STANDCO—Sticht (Herman H) Co Inc
STANEON—General Cable Corp
Stanley-Carter Co—see Stanley Electric Tools
Stanley Electric Tools 436 Myrtle St New Britain
Conn
Stanley Works—see Stanley Electric Tools
STAPUT FAIRLEADER—Barry (Williams B) Co
STAR—Standard Electric Co Inc

Star-A Electric Mfg Co Inc 269 Meserole St Brook-
lyn 6 NY
Star Expansion Mountainville NY
Star Expansion Bolt Co—see Star Expansion
STAR-GLO—Electro Lighting Corp
STAR-LUX—Curtis-AilBrite Lighting Inc
STAR-LUX—Revere Electric Mfg Co
Star Porcelain Co Muirhead Ave Trenton 9 NJ
STARBRITE—Comet Lamp Co
STARLINE—Electro-Mechanical Instrument Co
Starrett (LS) Co Athol Mass
START-O-METIC—Airsco Mfg Co Inc
STARZIT—Aircraft Specialties Inc
STATELINE—Howard Industries Inc
States Co 19 New Park Ave Hartford 6 Conn
STATICATOR—Hewson Co Inc
STATIC—Hirschman-Pohle Co Inc
STATIKIL—Doyle (J E) Co
STATISCOPIES—Mineralac Electric Co
STAVOLT—Christie Electric Corp
STAXXAUSTER—Allen Cooler & Ventilator Inc
STAXRITE—Cutler-Hammer Inc
STAZ-RITE—Utilities Service Co
STAZIN—Star Expansion
Stearns Electric Corp 120 N Broadway Milwaukee 2
Wis
Stearns Magnetic Inc—Stearns Electric Corp
Stebor Mfg Co 2700 Roosevelt Rd Broadview III
STEBERLITE—Stebor Mfg Co
Steel City Electric Co 1207 Columbus Ave Pitts-
burgh 33 Pa
Steel Electric Products Co Inc 5602 18th Ave Brook-
lyn 4 NY
Steel & Tubes Inc—see Republic Steel Corp
STEELARC—All-State Welding Alloys Co Inc
Steelduct Co Republic Steel Bldg Youngstown Ohio
STEELFLEX—Universal Metal Hose Co
STEELGRIP—Armstrong-Bray & Co
STEELTITE—Eliza Metal Products Co
STEELWING—Hubbard & Co
Steiner-Ives Co Springfield Rd Union NJ
STEMMAN—Richards (J R) Co
STERILAMP—Westinghouse Electric Corp Lamp Div
Sterling Blower Co 791 Windsor St Hartford Conn
Sterling Electric Motors Inc 5401 Telegraph Rd Los
Angeles 22 Calif
Stemberg Mfg Co 4510 Addison St Chicago 41
Illinois
Stern Industries Winsted 1 Minn
Stevens Appliance Truck Co Norton Rd (P O Box 897)
Augusta Ga
STEWART-AIRE—Stewart Industries Inc
Stewart Bros Div Instrument Laboratories 315 W
Walton Pl Chicago 10 III
Stewart Industries Inc 320 E St Joseph St Indian-
apolis 2 Ind
Stewart Mfg Co Inc—see Stewart Industries Inc
Sticht (Herman H) Co Inc 27 Park Place New York 7
NY
STICK-VAR—Electro-Technical Products Div
STICKBACK—Tec Imports
STIXWELL—Clifton Mfg Co Inc
STOCK-BIN-LITE—Benjamin Electric Mfg Co
STOCK PICKER—Roll-Away Truck Mfg Co Inc
Stocker & Yale Inc Green St Marblehead Mass
STOCKLITE—Appleton Electric Co
STOK-FOUNT—International Electric Fence Co Inc
Stokes (F J) Corp 5500 Tabor Rd Philadelphia 20 Pa
Stokes (F J) Machine Co—see Stokes (F J) Corp
Stonco Electric Products Co 333 Monroe Ave Kenil-
worth NJ
Stone Mfg Co—see Stonco Electric Products Co
Stone Paper Tube Co 900 Franklin St N E Washing-
ton 17 DC
Stonite Coil Corp U S Hwy 130 Yardville NJ
STORACK—American Steel & Iron Works
STORAGE MASTER—Haertel (Walter) Co
Stow Mfg Co 162 Shear St Binghamton NY
Stradley Engineering Co P O Box 6006 Pittsburgh 11
Pa
STRAIGHT-LINE—Leviton Mfg Co Inc
STRAIGHT-LINE—Lyon Rural Electric Co
STRATE-LINE—Pyle-National Co
Stratfield Co 434 Grand St Bridgeport 4 Conn
STRATO-LUX—Curtis Lighting Div
STRATO-RAY—Emerson-Pryme Co
STREAM COOLED—Baldor Electric Co
STRALUX—Lichter Inc
STRING-A-LITE—Joy Mfg Co
STRINGER—Utilities Safety Supply Co Inc
STRIP EASE—Radix Wire Corp
STRIP-X—General Cement Mfg Co
STRIPMASTER—Ideal Industries Inc
STRIPSEAL—Burdry Corp
STROBOLUX—General Radio Co
STROBOTAC—General Radio Co
Stromberg Electric Co—see Stromberg Time Corp
Stromberg Time Corp 135 S Main St Thomaston
Conn
STRONGHOLD—Haartz-Mason Inc
STRUCTOR—Steel City Electric Co
Struthers-Dunn Inc Pitman NJ
STUD DRIVER—Remington Arms Co Inc
STUD-PINS—Fastway Fasteners Inc
STURDI-BUILT—Chalfant Products Co Inc
STYLIST—Electro Lighting Corp
STYLOFLEX—Natar Corp
SUBALOX—Subox Inc
SUBMATIC—Franklin Electric Co Inc
SUBMERSIPOOL—Franklin Electric Co Inc
Subox Inc Fairmont Plant Hackensack NJ
SUBURBAN—Miller Co
SUBURBAN—Reed Unit-Fans Inc

Suclar Laboratories Inc 1197 McCarter Highway Newark NJ
 SUDDED DEPTH—Paine Co
 Sulfex Corp 33-40 57th St Woodside 77 NY
 Sulfo Inc 1143 E Jersey St Elizabeth 4 NJ
 Sultan Electric Co—Acme Lighting & Mfg Co
 Sultas Lighting Co—Acme Lighting & Mfg Co
 Summit Instrument Co—see Seely Instrument Co Inc
 Sumo Pumps Inc P O Box 963 Sanford Conn
 SUMPTROL—Square D Co
 Sun Electric Products Inc 28 S Day St Orange NJ
 Sun-Lite Mfg Co 2555 Bellevue Ave Detroit 7 Mich
 Sun-Tron Corp 7435 W. Wilson Ave Chicago 31 Illinois
 Sunbeam Lighting Co 777 E 4th Pl Los Angeles 21 Calif
 Sunbeam Visionaire Lighting Co—see Sunbeam Lighting Co
 Sundh Electric Co—see Clark Controller Co
 SUNETTE—Versen (Kurt) Co
 Sunrise Products Co—see Vemaline Products Co
 SUNSWITCH—Riley Co Inc
 Sunswarm Inc 2355 Ft Henry Dr (Box 263) Kingsport Tenn
 SUPAIRTHERMAL—Nordberg Mfg Co
 SUPER CYCLE—Chicago Pneumatic Tool Co
 SUPER DREADNAUGHT—Gould-National Batteries Inc
 SUPER-GRIP—Diamond Expansion Bolt Co Inc
 SUPER HI—Westinghouse Electric Corp Lamp Div
 SUPER INDUSTRIAL—National Specialties Co Inc
 SUPER-LAG—Bussmann Mfg Div
 SUPER-LOK—Stebber Mfg Co
 SUPER MAGNET—Cutler-Hammer Inc
 SUPER-PARARITE—Paranite Wire & Cable Div Essex Wire Corp
 SUPER POWER—Coffing Hoist Div
 SUPER-POWER—Ramsel Fastening System
 SUPER SERVICE—General Cable Corp
 SUPER SPEED—RCS Tool Corp
 SUPER-STIK—Superior Insulating Tape Co
 SUPER SUCTION—National Super Service Co
 Super Tool Co 21650 Hoover Rd Detroit 13 Mich
 SUPER-V-BEAM—Duro-Test Corp
 SUPERBUILT—Electrical Mfg Co
 SUPERCON—Superior Electric Co
 SUPERIOR—Champion DeArment Tool Co
 SUPERIOR—Erie Tool Works
 SUPERIOR—Round (David) & Son Inc
 SUPERIOR—Wall (P) Mfg Co
 Superior American Fire Alarm Div—see SAFA Alarm Div
 Superior Appliance Co—see Superior Interlock Corp
 Superior Carbon Products Co 9115 George Ave Cleveland 5 Ohio
 Superior Electric Co 83 Laurel St Bristol Conn
 Superior Electric Mfg Co Inc—see Eagle Electric Mfg Co Inc
 Superior Insulating Tape Co 3100 Lambdin Ave St Louis 15 Mo
 Superior Interlock Corp 73-39 Central Ave Glendale 27 NY
 Superior Mfg Co—see Superior Staple Mfg Co
 Superior Porcelain Co 931 1/2 Market St Parkersburg W Va
 Superior Staple Mfg Co 40 Commercial St Fitchburg Mass
 SUPERJUSTABLE—William (J H) & Co
 SUPERMATER—Willard Storage Battery Div
 SUPERMARKETER—Miller Co
 SUPERRENCH—Williams (J H) & Co
 SUPERSAW—RCS Tool Corp
 SUPERSEAL—Anacosta Wire & Cable Co
 SUPERSHEATH—General Cable Corp
 SUPERSOCKET—Williams (J H) & Co
 SUPERTITE—General Cable Corp
 SUPERTITE—Engelhard (Charles) Inc
 SUPRAMICA—Mycalox Corp of America
 SUPREME—Kaiser Aluminum & Chemical Sales Inc
 SUPREME—Scranton Storage Battery Corp
 Supreme Electric Products Co 194 Vassar St Rochester 7 NY
 SUPRENE—Coville Insulated Wire Co
 Supro Lux Mfg Co Inc 406-416 E 161 St New York 51 NY
 SUR-GROUND—So-Cal Electro Products Inc
 SURCO—Surprenant Mfg Co
 SURE-BUILT—Shure Mfg Corp
 SURE-LITE—House-O-Lite Corp
 SURELITE—Clan Sweco
 Surelites Products Co 368 E 148 St New York 55 NY
 Surety Rubber Co North High St Carrollton Ohio
 SURF-A-LITE—Electro Lighting Corp
 SURFA-ETCH—Rust-Oleum Corp
 SURFA-SELE—Rust-Oleum Corp
 SURFAX—Pass & Seymour Inc
 SURFLENE—Surprenant Mfg Co
 SURFLEX—Surprenant Mfg Co
 SURFLINGER—Westinghouse Electric Corp
 SURFLOW—Surprenant Mfg Co
 Surprenant Mfg Co 199 Washington St Boston 8 Mass
 Surrogate Storage Battery Co Inc Jefferson Ave Salem Mass
 SURVO—Surprenant Mfg Co
 SUTCO—Sutton (O A) Corp
 Suttle Equipment Co 135 S LaSalle St Chicago 3 Ill
 Sutton (O A) Corp 1812 W Second Wichita Kans
 Swan Mfg Co 1801 W 26 St Vancouver Wash
 SWEATRITE—Dunton (MW) Co
 SWEDG-ON—Lenco Inc
 Swedish Iron & Steel Corp 910 Westfield Ave Elizabeth NJ

Swett (A L) Iron Works 166 Glenwood Ave Medina NY
 SWING-AWAY—Electrical Mfg Co
 SWING-EASY—Anderson (Albert & JM) Mfg Co
 SWING TOP—Electrical Fittings Corp
 SWING-WA—General Electric Co
 Swiss Jewel Co 225 Lafayette Bldg Phila 6 Pa
 SWITCH-KING—Cable Electric Products Inc
 SWITCH MAT—Recora Co Inc
 SWLEX—O-Lite—Hoffman Engineering Corp
 SWITCHETTE—General Electric Co
 SWITCHMATIC—Eagle Electric Mfg Co Inc
 Swiveller Co Inc Nanuet NY
 SWIVELITE—Amplex Corp
 SYL-O-BLACK—Mayer Corp
 SYL-O-ETTE—Mayer Corp
 SYL-O-WHITE—Mayer Corp
 SYLKVD—Dow Corning Corp
 SYLVALOY—Driver (Wilbur B) Co
 Sylvania Electric Products Inc 1740 Broadway NY 19 NY
 SYNCHRON—Hansen Mfg Co Inc
 SYNCHROSTAT—Electric Machinery Mfg Co
 SYNCHRO-BREAK—Square D Co
 SYNCR-SPED—Allis (Louis) Co
 SYNCRGEAR—U S Electrical Motors Inc
 SYNDUCTION—Allis-Chalmers Mfg Co
 SYNKOTE—Plastoid Corp
 SYNROFLASHING—Blackhawk Industries
 SYNTRUB—Kaiser Aluminum & Chemical Sales Inc
 SYNTHAMICA—Mycalox Corp of America
 SYNTHINOL—Rome Cable Corp
 SYNTHITE—Dolph (John C) Co
 SYNTHOL—Crescent Insulated Wire & Cable Co
 SYNTHOLVAR—Varflex Corp
 Syntron Co 690 Lexington Ave Homer City Pa
 System Analyzer Corp 700 W State St Nokomis Ill
 TA Mfg Corp 4607 Alger St Los Angeles 39 Calif
 T & B—Thomas & Betts Co
 T-O—Chase-Shawmut Co
 TEC—Circle F Mfg Co
 TK—Tuttle & Kift Inc
 T V Wire Products—see Teco Insulated Wire
 T-W—Taylor-Winfield Corp
 TAB-WELD—Electric Controller & Mfg Co
 Taidco Div Tail Mfg Co 500 Webster St Dayton 1 Ohio
 TANK—Hewson Co Inc
 Tal Bender Inc—see Hein-Werner Corp
 Tal Bending Equipment Inc—see Hein Werner Corp
 Tal Prestal Bender—see Hein-Werner Corp
 TALK-A-LOT—Faxon Electronic Industries
 Talk-A-Phone Co 1512 S Pulaski Rd Chicago 23 Ill
 TALKMASTER—Dalmotron Co
 TALL REACH—Kett Tool Co
 TALLSCOPE—Up-Right Inc
 TAMPIN—Star Expansion
 TAN-O-MITE—Ohmite Mfg Co
 TAND-O-LITE—House-O-Lite Corp
 TANKTROL—Automatic Control Co
 TANSOL—Mallory (P R) & Co Inc
 TANTALYTIC—General Electric Co
 TAP LITE—Minneapolis-Honeywell Regulator Co
 TAP-ON—Tomic Sales & Engineering Co
 TAPE-MATE—Holub Industries Inc
 TAPERDUR—Art Metal Co
 TAPIT—Burdny Corp
 TARGET—Anchor Packing Co
 TATTELITE—Sittler Corp
 TATTELITE-TESTER—Rodale Mfg Co Inc
 TAURIL—Anchor Packing Co
 Taylor (R W) Electric Co—see Taylor Electric Inc
 Taylor Electric Inc 15400 Dale Detroit 23 Mich
 Taylor Fibre Co Norristown Pa
 Taylor-Winfield Corp 1052 Mahoning Ave Warren Ohio
 Tec Imports 14525 Bessemer St Van Nuys Calif
 Technical Development Corp—see Technical Electronics Corp
 Technical Electronics Corp 4060 Ince Blvd Culver City Calif
 TECHNICIAN—Wakfield Co
 TECHNITE—Capewell Mfg Co
 Tedcar Products Co Box 1209 Union NJ
 TEEL—Dayton Electric Mfg Co
 TEELON—Benjamin Electric Mfg Co
 Tektronix Inc P O Box 831 Portland 7 Ore
 TEL-A-PIPE—Westline Products Div
 TEL-ALARM—Industrial Automation Corp
 TEL-ALARM—Tigerman Engineering Co
 TELCO—General Cement Mfg Co
 Telcon P O Box 216 Pacific Palisades Calif
 TELECOM—Southwestern Plastic Pipe Co
 TELECOM—Whitney Blake Co
 TELECOM—Webster Electric Co
 TELECORD—Whitney Blake Co
 TELECORDER—Automatic Control Co
 TELEDUCT—Whitney Blake Co
 TELEFRAME—Whitney Blake Co
 TELEGROUND—Whitney Blake Co
 TELEMAND—T-T-E Circuit Breaker Co
 TELEPAGE—Webster Electric Co
 TELEPRENE—Whitney Blake Co
 TELESAN—Automatic Control Co
 TELESOPER—Economy Engineering Co
 TELESOPIC—Kulka Electric Corp
 TELESAL—Whitney Blake Co
 TELESTER—Automatic Control Co

TELETALK—Webster Electric Co
 TELTROF—Howard Electric Co
 TELTROLO—Automatic Control Co
 Television Hardware Mfg Co—see General Cement Mfg Co
 TELEVOLT—Sola Electric Co
 TEMCO—Electrical Mfg Co
 TEMCO—Thermo Electric Mfg Co
 TEMCOMETER—Thermo Electric Mfg Co
 TEMFLEX—Minnesota Mining & Mfg Co Irvington Div
 TEMP-R-TAPE—Connecticut Hard Rubber Co
 TEMP-A-TUBE—Acra Electric Corp
 TEMPALL—Tobe Deutschmann Corp
 TEMPBRAID—HiTemp Wires Inc
 TEMPCALAD—HiTemp Wires Inc
 Templeton Kenly & Co Gardner Rd Broadview W
 TEMPOTHERM—General Controls Co
 TEMPRENE—HiTemp Wires Inc
 TEMPREX—HiTemp Wires Inc
 TEMPRITE—HiTemp Wires Inc
 TEMPTUBE—HiTemp Wires Inc
 TEMTROL—Penn Controls Inc
 TENAX—Diamond Expansion Bolt Co Inc
 TENNA-ROTOR—Alliance Mfg Co Inc
 TENNA-SCOPE—Alliance Mfg Co Inc
 TENNA-SHINGLE—Jaxev
 TENNA-TUBE—Jaxev
 TENS-A-MATIC—Murray Equipment Co Inc
 TENSLOK—General Cable Corp
 TENSITE—Driver (Wilbur B) Co
 Tensolite Insulated Wire Co Inc West Main St Tarrytown NY
 Terado Co 1068 Raymond Ave St Paul 14 Minn
 TERMEND—Buchanan Electrical Products Corp
 TERMINAL BLOCKS—Wama Co
 Termite Drills Inc—see Ralton Corp
 TESCO—Eastern Specialty Co
 TESTO LITES—Brach Mfg Co
 TETCO—Electric Tachometer Corp
 Teco Insulated Wire 108 E Prospect Ave Burbank Calif
 TEXALITE—General Electric Co
 Texas Creosoting Co P O Box 131 Orange Tex
 TEXCEL—Permacel-Lepages Inc
 TEXSLIDE—Allis-Chalmers Mfg Co
 Tey Mfg Co—see Emhart Mfg Co
 Theiler (H J) Corp Ashmont Ave Whitinsville Mass
 Thepitt Mfg Co Gregg & Hammond Sts Carnegie Pennsylvania
 Ther Electric & Machine Works 17 S Jefferson St Chicago 6 Ill
 THER-MONIC—Induction Heating Corp
 THERM-A-TAP—Beckley Electric Co Inc
 THERM-O-LITE—Progress Mfg Co Inc
 THERM-O-METER—Simpson Electric Co
 THERM-O-TRON—Trindl Products Ltd
 THERMA-CAL—North Shore Nameplate Inc
 THERMA-KLEEN—North Shore Nameplate Inc
 THERMA-SOL—North Shore Nameplate Inc
 Thermador Electrical Mfg Co 5119 District Blvd Los Angeles 22 Calif
 Thermal Aire Inc 510 Cambridge St Boston (Allston) Mass
 Thermal American Fused Quartz Co 18 Salem St Dover NJ
 THERMAL-RAYE—Thermal Aire Inc
 Thermal Syndicate Ltd—see Thermal American Fused Quartz Co
 THERMALEZE—Phelps Dodge Copper Products Corp
 THERMALINE—General Electric Co
 THERMALL—LaRose (WT) & Associates Inc
 THERMALOAD—Monitor Controller Co
 THERMALON—HiTemp Wires Inc
 THERMASTATIC—Wall (P) Mfg Co
 THERMASTER—Willard Storage Battery Div
 THERMATROL—Hatfield Wire & Cable Div
 THERMISTEMP—Yellow Springs Instrument Co Inc
 Thermo Electric Mfg Co 465 Huff St Dubuque Iowa
 THERMO-GRIP—Ideal Industries Inc
 THERMO-TIN—Salton Mfg Co Inc
 THERMO-TIP—Ideal Industries Inc
 THERMO-TRIEX—Triangle Conduit & Cable Co Inc
 THERMOLAIN—Star Porcelain Co
 THERMOLYNE—Thermo Electric Mfg Co
 Thermo Mfg Co 1017 Rosine St Houston Tex
 THERMOPILOT—General Control Co
 THERMOPLAX—Cutler-Hammer Inc
 THERMOPRENE—Whitney Blake Co
 THERMOSWITCH—Fenwal Inc
 Thiel Tool & Engineering Co 1417 N Market St St Louis 6 Mo
 THIMBLEVE—Chance (A B) Co
 THIN LINE—Sun-Lite Mfg Co
 THINETTE—General Electric Co
 THINLINE—General Electric Co
 THINPLATE—Park Nameplate Co Inc
 3RD WAY—Remington Corp
 Thomas Associates—see TA Mfg Corp
 Thomas & Betts Co 36 Butler St Elizabeth 1 NJ
 Thomas Instrument Co Box 41 Liverpool Rd Phoenix NY
 Thomas (R) & Sons Co—see Delta-Star Electric Div
 HK Porter Co Inc
 Thompson Electric Co P O Box 873 Cleveland 22 Ohio
 Thompson Mfg Co 611 Stevens St Geneva Ill
 Thor Corp 2115 S 54 Ave Chicago 50 Ill
 Thor Power Tool Co 175 N State St Aurora Ill
 THOREX—Ohio Brass Co
 Thread Ezy Mfg Co—see Toledo Pipe Threading Machine Co
 THRED-O-MATIC—Collins Machinery Corp
 THREE "E"—Electrical Engineers Equipment Co
 THREE "G"—Gruber Bros Inc

THREE-U-LITE—Northern Incandescent Lamp Co
THRIFFEE—Markel Electric Products Inc
THUNDER-TWIST—New England Carbide Tool Co Inc
THUNDERBOLT—Vulcan Electric Co
THYMOTROL—General Electric Co
TI-CO—Thomas Instrument Co
TIFFIN—Quincy Mfg Co
TIGER—Boston Woven Hose & Rubber Co
TIGER-BILT—Tigerman Engineering Co
TIGER BRAND—American Steel & Wire Div United States Steel Corp
Tigerman Engineering Co 4332 N Western Ave Chicago 18 III
Tilden Tool Mfg Co 209 Los Molinos San Clemente Calif
TIME-A-TROL—Hamscraft Co
TIME-ALL—International Register Co
TIME-WINDER—International Register Co
TIMEMASTER—Willard Storage Battery Div
Times Appliance Co—see Times Wire & Cable Co
Times Wire & Cable Co Wallingford Conn
TIN-EZY—Johnson Mfg Co Inc
TINOL—American Solder & Flux Co
TINY-GLOW—Industrial Devices Inc
TINY-MITE—Jordan Electric Products Div
TINYLITES—Drake Mfg Co
TIP-TOP—General Cable Corp
TIREX—Simplex Wire & Cable Co
TITAN—Detroit Hoist & Machine Co
Titchener (E H) & Co 67 Clifton St Binghamton NY
TITE-BIND—Thomas & Betts Co
TITE-BITE—Thermal & Betts Co
TITEBILT—Phelps Dodge Copper Products Corp
Tobe Deutschmann Corp Providence Highway Norwood Mass
Tocco Div Ohio Crankshaft Co 3800 Harvard Ave Cleveland 5 Ohio
Tod-Lite Inc 3401 W W 10 St Oklahoma City Okla
TOD-L-SNAP—I-T-E Circuit Breaker Co
Toledo Commutator Co 1101 S Chestnut St Owosso Mich
Toledo Pipe Threading Machine Co 1445 Summit St Toledo 4 Ohio
Toledo Standard Commutator Co—see Toledo Commutator Co
Tolen (William) & Son Inc 4041 Ridge Ave Philadelphia Pa
Tomic Sales & Engineering Co 20000 Sherwood Ave Detroit 34 Mich
TONEPAK—Lee Electric Inc
TONG-TEST—Columbia Electric Mfg Co
TONOTRON—Hughes Products
TOOTS-E—Lusted (CM) & Co Inc
Tooflight Corp 160 E 9th Ave York Pa
Tooflight Tape Co—see Tooflight Corp
Tooflight Tool—see Tooflight Corp
TOPHBESTOS—Driver (Wilbur B) Co
TOPHET—Driver (Wilbur B) Co
TOPLITE—Swiveller Co Inc
TOPNOTCH—Day-Brite Lighting Inc
TOPPER—Hubbell (Harvey) Inc
TORCH-O-MATIC—Velocity Power Tool Co
Tork Clock Co Inc—see Tork Time Controls Inc
TORK-MASTER—General Control Co
Tork Time Controls Inc 1000 Grove St Mt Vernon WV
TORKMASTER—Tork Time Controls Inc
TORKOL—Line Material Industries
TORNADO—Breuer Electric Mfg Co
TORPEDO—Swiveller Co Inc
Torrington Co 59 Field St Torrington Conn
TORRIVENT—Trane Co
TOTALUME—Wilbur & Williams Co
TOTRUST—Wilbur & Williams Co
Touch-Plate Mfg Co Box 1970 Long Beach Calif
TOUCHETTE—Rodalie Mfg Co Inc
Tower Craftsmen Inc 105 Chestnut St Red Bank New Jersey
TOWN & HIGHWAY—Westinghouse Electric Co
TOYLIGHT—Aerolux Lights Corp
TRA-BAK—Great Northern Mfg Corp
TRAC-O-LITE—Comet Lamp Co
Trade Service Publications Inc 343 E Ohio St Chicago 11 III
Trade-Wind Motors Inc 7755 Paramount Blvd Rivera Calif
TRADELITER—Duro-Test Corp
TRAFFLEX—Crosce-Hinds Co
TRAILBLAZER—Watfield Co
Trane Co 2nd & Cameron Ave La Crosse Wis
TRANSEAL—Johns-Manville
TRANS-O-MATIC—Lake Shore Electric Corp
TRANSACTOR—Stromberg Time Corp
TRANSCO—Cott Co of America Inc
TRANSISTA FLASH—U-C Lite Mfg Co
TRANSTITE—Johns-Manville
Transolite Corp 550 Fifth Ave New York 36 NY
TRANSPORTER—Automatic Transportation Co
TRANSTRACK—Sangamo Electric Co
TRANSTRIDER—Automatic Transportation Co
TRANSTACKER—Automatic Transportation Co
TRANSTRACOR—Automatic Transportation Co
TRANSTVERTER—Hertner Electric Co
TRANSEYOR—Automatic Transportation Co
TRAP-DRI—Controls Co of America
TRAPIT—Controls Co of America
TRAV-ELECTRIC—Ternado Co
TRAVEL TOWER—Pitman Mfg Co
TREADLITE—Linemaster Switch Corp
TRENCHLAY—General Cable Corp
Trent (Harold E) Co—see Trent Inc
Trent Inc 201-299 Leverington Ave Phila 27 Pa
TRI-BIT—Arro Expansion Bolt Co
TRI-CLAD—General Electric Co

TRI-FLUX—Redmond Co Inc
TRI-LITE—Artistic Lamp Mfg Co Inc
TRI-ONIC—Chase-Shawmut Co
Tri-Part Mfg Co 925 Cherry St Detroit 1 Mich
TRI-PHASE—Taylor-Winfield Corp
TRI-WAY—U S Expansion Bolt Co
TRIADRY—Triangle Conduit & Cable Co Inc
Triangle Conduit & Cable Co Inc Triangle & Jersey Aves New Brunswick NJ
Triangle Equipment Co Inc 45 River Rd Nutley 10 New Jersey
Triangle Instruments Co—see Epco Electronics Inc
Trico Fuse Mfg Co 2948 No 5th St Milwaukee 12 Wis
TRICON—Triangle Conduit & Cable Co Inc
TRIEUX—Triangle Conduit & Cable Co Inc
TRIFORMANCE—Triangle Conduit & Cable Co Inc
TRIG—Roston Corp
TRIG-R-HEAT—Wall (P) Mfg Co
TRIG TOWERS—Roston Corp
TRIMLINE—Rome Cable Corp
TRIMLINE—Vulcan Radiator Co
Trimount Instrument Co 3119 W Lake St Chicago 12 III
Trindl Products Ltd 1807-11 S Clark St Chicago 16 III
Trim Mfg Corp 1430 Ferris Place New York 61 NY
Trio Laboratories Inc Expressway Industrial Park Plainville NY
TRIOLINE—Triangle Conduit & Cable Co Inc
TRIOLINE—Triangle Conduit & Cable Co Inc
TRION—Chase-Shawmut Co
TRIONET—Chase-Shawmut Co
TRIONODE—Walbridge Corp
TRIOPRENE—Triangle Conduit & Cable Co Inc
TRIOSEAL—Triangle Conduit & Cable Co Inc
TRIOZONE—Triangle Conduit & Cable Co Inc
TRIP-O-LINK—Kearney (James R) Corp
TRIP-OUT—Kearney (James R) Corp
TRIP-SAVER—Kearney (James R) Corp
TRIP-X-TACT—Cossert Mfg Corp
TRIPLE-A—Quincy Co Inc
Triple-A Specialty Co 2835 N Western Ave Chicago 18 III
Triplet Electrical Instrument Co 286 Harmon Rd Bluffton Ohio
TRIPLEVE—Chance (A B) Co
TRIPLC—Pyre-National Co
TRIPLUX—Wemco Electric Co
TRIPOMATIC—Kearney (James R) Corp
Tripp Mfg Co 133 N Jefferson St Chicago 6 III
TRIPRUF—Triangle Conduit & Cable Co Inc
TRISTEEL—Triangle Conduit & Cable Co Inc
Triton Mfg Co Inc East Haddam Conn
TROJAN—Hexacon Electric Co
TROL-E-DUCT—Bulldog Electric Products Div
TROLLEYPHONE—Femco Inc
Trombeta Solenoid Corp 329 N Milwaukee St Milwaukee 2 Wis
TROMBOLITE—Amplex Corp
TRON—Bussmann Mfg Div
TROPIC-GLO—Knapp-Monarch Co
TROUBLE SAVER—Patent Scaffolding Co Inc
TRU-SET—Ramset Fastening System
TRU-TORK—Nakervis (Geo L) Co
TRU-WHITE—Duro-Test Corp
Truco Masonry Drilling Div Wheel Trueing Tool Co 3200-3220 W Davison Ave Detroit 38 Mich
TRUCOLITE—Guth (Edwin F) Co
Trumbull Components Dept—see General Electric Co
Trumbull Electric Mfg Co—see General Electric Co
TRUMBULLITE—General Electric Co
TUBELOX—Patent Scaffolding Co Inc
TUBENDERS—Henderson Electric Co
TUBETOP—P-W Industries Inc
TUCAWELL—Electric Tube Products
TUCALL—Edwards Co Inc
TUCKAWAY—Bulldog Industries Div
TUFFEX—Everwarm Inc
TUFFLEX—Brand (William) & Co Inc
TUG—Mercury Mfg Co
TULAMP—General Electric Co
TULITO—Meyer Machine Inc
Tulsa Winch Div Vickers Inc 815 E First St Tulsa 20 Okla
TUMB-L-TITE—U S Expansion Bolt Co
TUMBLIN—Star Expansion
TUMS—Nylon Mfg Co
TUNGAR—General Electric Co
TUR-O-STRIP—House-O-Lite Corp
TURBO—Brand (William) & Co Inc
TURBO-COMPRESSORS—Spencer Turbine Co
TURBO-JET—Allis-Chalmers Mfg Co
Turbo Machine Co Lansdale Pa
TURBO-RUPTOR—Allis-Chalmers Mfg Co
TURBO-VAC—Kent Co
TURBOLENE—Brand (William) & Co Inc
TURBOTEMP—Brand (William) & Co Inc
TURBOTHERM—Brand (William) & Co Inc
TURBOTRANS—Brand (William) & Co Inc
TURBOVANE—Westinghouse Electric Corp
TURBOZONE—Brand (William) & Co Inc
Turco Products Inc 24600 S Main St Wilmington Calif
TURCO-SOLV—Turco Products Inc
TURN TYTE—Rodalie Mfg Co Inc
Turner Brass Works 821 Park Ave Sycamore III
TURNEX—Woodhead (Daniel) Co
TURNLOK—Pass & Seymour Inc
TURNLOX—Benjamin Electric Mfg Co
TURQUOISE—Duro-Test Corp
TURRET—General Electric Co
Tuttle & Kirt Inc 1823 N Monitor St Chicago 39 III
TWIN—General Electric Co
TWIN-LUG—Blackburn (Jasper) Corp

TWIN-SIX—Burgess Battery Co
TWIN ZONE—Hoyt Mfg Corp
TWINEYE—Chance (A B) Co
TWIST-IN—Tomic Sales & Engineering Co
TWIST-LOC—Universal Metal Hose Co
TWIST-LOCK—Hubbell (Harvey) Inc
TWIST-MOUNT—Pyramid Electric Co
TWIST-RACK—P-W Industries Inc
TWIST-TITE—Hubbell (Harvey) Inc
TWO-SHOT—Kaiser Aluminum & Chemical Sales Inc
TYMANDATER—Cincinnati Time Recorder Co
TYNEE-DRY—Pyramid Electric Co
TYNISWITCH—Detroit Controls Div
TYPOTRON—Hughes Products
TYTEX—Exide Industrial Div
TYTON—U S Expansion Bolt Co

U
U-BLADE—Leviton Mfg Co Inc
U-C-LITE Mfg Co 1050 W Hubbard St Chicago 22

U-LINE—Ilumintronic Engineering
U-RAD—Wiegand (Edwin L) Co
U-RE-LITE—I-T-E Circuit Breaker Co
U S E—U S Expansion Bolt Co
USG—United States Graphite Co
UTC—United Transformer Co
UCILON—Metal Thermit Corp
UFLEX—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
Ulanet (George) Co 413-15 Market St Newark 5 NJ
ULMI-MOLD—Roval Electric Corp
ULTRA-FLEXARMS—White (O C) Co
ULTRA-LITE—Reverse Electric Mfg Co
ULTRA-LUX—Garcy Lighting Div
Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif
ULTRAFLEX—Cutler-Hammer Inc
ULTRALUME—Westinghouse Electric Corp Lamp Div
ULTRATUBE—Plastoid Corp
ULTRAVALVE—General Control Co
ULTRAVERTER—Blonder-Tongue Laboratories Inc
UNADCO—United Mfg Co
UNDARK—United States Radium Corp
Ungar Electric Tools Inc 4101 Redwood Ave Los Angeles 66 Calif
UNI-BALLAST—Line Material Industries
UNI-BUS—Electric Distribution Products Inc
UNI-BUS—Electric Machinery Mfg Co
UNI-CAST—Redmond Co Inc
UNI-CLIP—Unistrut Products Co
UNI-CORE—Alpha Metals Inc
UNI-CRIMP—Sherman (H B) Mfg Co
UNI-DRIVE—Fairbanks Morse & Co
UNI-FORM'D—Zinsco Electrical Products
UNI-LARM—Russell & Stoll Co Inc
UNI-PACT—Spartan Faraday Inc
UNI-TOG—Kirkwood Commutator Corp
UNIBRAKES—Master Electric Div
UNICHROME—Metal & Thermit Corp
UNICLAD—G & W Electric Specialty Co
UNICLOSED—U S Electrical Motors Inc
UNIFLEX—Zinsco Electrical Products
UNILET—Appleton Electric Co
UNILINE—Pass & Seymour Inc
UNILITE—Electro Lighting Corp
Unimax Switch Div W L Maxson Corp Ives Rd Wallingford Conn
UNION—Multi Electric Mfg Inc
Union Carbide Corp Silicones Div 30 E 42 St New York 17 NY
Union Insulating Co Inc Box 351 Parkersburg W Va
Union Metal Mfg Co 1432 Maple Ave Canton 5 Ohio
UNIPAK—Sprague Electric Co
UNISEAL—Franklin Electric Co Inc
UNISEAL—Johns-Manville
UNISHEAR—Stanley Electric Tools
UNISPEED—Stromberg Time Corp
UNIT BLO—United Blower Co Inc
UNIT BREAKER—Cutler-Hammer Inc
UNIT-VERSAL—Bulldog Electric Products Div
UNITAP—Dossert Mfg Corp
United Blower Co Inc 193 Centre St NY 13 NY
United Chromium—see Metal & Thermit Corp
United Cinephone Corp—see Ripley Co Inc
United Electric Controls Co 85 School St Watertown 72 Mass
United Electric Machinery Co 1824E N 72 Ct Elmwood Park III
United Electric Motor Co 178 Centre St NY 13 NY
United Enterprises 15735 S Paramount Blvd Paramount Calif
United Mfg Co 41 Haig St Hamden 14 Conn
United Pressed Products Co 900 S Desplaines St Chicago 7 III
United Transformer Co 150 Varick St New York 13 NY
United States Air Conditioning Corp P O Box 360 Delaware Ohio
U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif
United States Electrical Tool Co 3640 Llewellyn St Cincinnati Ohio
United States Electronics Corp 275 Warren St Lyndhurst NJ
U S Expansion Bolt Co State St & PRR York Pa
U S Gauge Co—see U S Gauge Div
U S Gauge Div American Machine & Metals Inc Clymer Ave Sellersville Pa
United States Graphite Co 1621 Holland Ave Saginaw Mich

U S JUNIOR—Trine Mfg Corp
U S MOTORS—U S Electrical Motors Inc
United States Motors Corp 102 W 5th Ave Oshkosh Wis
U S PEERLESS—United States Rubber Co
United States Petroleum Co 104 Lakeview Ave Clifton NJ
United States Radium Corp Hanover Ave Morris-town NJ
U S Relay Co 717 N Coney Ave Azusa Calif
U S REVERE—United States Rubber Co
U S ROYAL—United States Rubber Co
United States Rubber Co 1230 Avenue of the Americas New York 20 NY
United States Rubber Co Naugatuck Chemical Div 946 Elm St Naugatuck Conn
U S Rubber Co Wire & Cable Div—see Kaiser Aluminum
U S SENIOR—Trine Mfg Corp
Unistrut Products Co 933 Washington Blvd Chicago 7 Ill
UNITOP—Allis-Chalmers Mfg Co
UNITRAVE—Trane Co
UNITRIP—Stromberg Time Corp
UNITROL—Cutler-Hammer Inc
UNITRON—I-T-E Circuit Breaker Co
UNITYPE—Superior Interlock Corp
UNIVERSAL—Hossfeld Mfg Co
UNIVERSAL—Mueller Electric Co
UNIVERSAL—Pittsburgh Reflector Co
Universal Clay Products Co 1558 First St Sandusky Ohio
Universal Electric Co 300 E Main St Owosso Mich
Universal Electric Sales Corp 3537 Lee Rd Cleveland 20 Ohio
Universal Mfg Corp 29-51 E 6th St Paterson NJ
Universal Metal Hose Co 2157 S Kedzie Ave Chicago 23 Ill
Universal Motor Co 438 Universal Dr Oshkosh Wis
Universal Power Corp—see Universal Electric Sales Corp
Universal Specialty Co—see Atlas E-E Corp
Universal Welder Corp—see Universal Electric Sales Corp
Universal Winding Co P O Box 1605 Providence 1 RI
Up-Right Inc Up-Right Scaffolds Div 1013 Pardee St Berkeley 10 Calif
UPLIFTER—Revolver Co
UPPCO—United Pressed Products Co
Uptegraft Mfg Co R E P O Box 182 Scottsdale Pa
URBAN LITE—Revere Electric Mfg Co
Urell Inc 43 Main St Bradford Pa
USAIRCO—United States Air Conditioning Corp
USCO Power Equipment Corp 829 N 36th Way Birmingham 4 Ala
Utica Drop Forge Tool Corp—see Utica Drop Forge & Tool Div
Utica Drop Forge & Tool Div Kelsey-Hayes Co Utica 4 NY
UTIL-A-TOOL—Templeton Kenly & Co
UTIL-A-VENT—General Blower Co
UTILICON—Diamond Power Specialty Corp
UTILISCOPE—Diamond Power Specialty Corp
UTILITE—Stebber Mfg Co
Utilities Safety Supply Co Inc Jefferson St & Highway 50 Lee's Summit Mo
Utilities Service Co 1 Pine St Allentown Pa
Utility Body Co 1530 Wood St Oakland 7 Calif
Utility Service Co Inc 1620 13th St (P O Box 102) Basine Wis
Utility Transformer and Equipment Co 702 Lynn Ave Baraboo Wis
UTILVUE—Diamond Power Specialty Corp
UTVLUX—Burton Mfg Co

V

V-BEAM—Duro-Test Corp
VCU—Guth (Edwin F) Co
VHS RELAY—Assembly Products Inc
V & S—Reliance Electric & Engineering Co
V V Fitting Co 711 Cherry St Phila 6 Pa
VAC-IT—Doyle Vacuum Cleaner Co
VAC-KING—American Floor Machine Co
VAC-ON—Hypro Engineering Inc
VAC-U-SEL—General Electric Co
Vaco Products Co 317 E Ontario St Chicago 11 Ill
VACU-BREAK—Buildog Electric Products Div
Vacuum Tube Products Co Inc 2020 Short St Ocean-side Calif
VALIMITOR—Electric Controller & Mfg Co
Valley Fan Mfg Co Box 206 Fort Valley Ga
VALV-AMP—General Electric Co
VAMISTOR—Western Instruments
Van Cleef Bros Inc—see Dutch Brand Div
Van Cleef Div Johns-Manville Co—see Dutch Brand Div
Van Dyke Div—see AOW Corp
VANO—Copous Engineering Corp
VAP OIL TITE—Ideal-Simplet Fittings Inc
VAPOR LUX—Luxor Lighting Products Inc
VAPOR-TEMP—Blue M Electric Co
VAPOR-TITE—Benjamin Electric Mfg Co
VAPORMASTER—Crouse-Hinds Co
VAPROTEX—Woodhead (Daniel) Co
VARBAND—Varflex Corp
VAREPACK—Electric Products Co
VAREX—Ohio Brass Co
VARFIL—Varflex Corp
Varflex Corp 508 W Court St Rome NY
VARFLO—Varflex Corp
VARGLAS—Varflex Corp

VARI-AMP—Allis-Chalmers Mfg Co
VARI-ANGLE—Weiskler Instrument Corp
VARI-FEED—Trico Fuse Mfg Co
VARI-SPEED—Reeves Pulley Co
VARI-SPOT—Curtis Lighting Div
VARIAC—General Radio Co
VARICELL—Superior Electric Co
VARIDOT—Simpson Electric Co
VARIDYNE—U S Electrical Motors Inc
VARIFORM—Lighting Products Inc
VARILUX—Major Equipment Co Inc
VARISTAT—Ward Leonard Electric Co
VARY-TALLY—Veeder-Root Inc
VASCO—Mitchell Industries Inc
VAULTMASTER—Haertel (Walter) Co
VECTAIRE—Preway Inc
Veeder-Root Inc Sargent St Hartford 2 Conn
VEEDRUM—Art Metal Co
VEID-A-RAY CORP—see Penetrax Corp
Velocity Power Tool Co 201 N Braddock Ave Pitts-burgh 8 Pa
VELOMETER—Illinois Testing Laboratories Inc
Velotron Inc 1186 Broadway NY 1 NY
VELVALUME—Day-Brite Lighting Inc
Vemaline Products Co P O Box 222 Hawthorne New Jersey
VENTAIR—Coppus Engineering Corp
VENTILATOR—Active Specialty Corp
Ventrola Mfg Co 501 S Chestnut St Owosso Mich
VENTURA—American-Standard
VENTURAFIN—American-Standard
VENTURIFLO—General Control Co
VERIBEST—Snyder (M L) & Son Inc
VERITELL—West Instrument Corp
VERSA—Versen (Kurt) Co
VERSA GROOVE—Anderson Electric Corp
Versabar Corp 14 Whyte St Jersey City NJ
VERSAL—Versen (Kurt) Co
VERSALINE—Miller Co
VERSATER—Benjamin Electric Mfg Co
VERSATER—Versen (Kurt) Co
VERSATIL—Versen (Kurt) Co
VERSATROL—Assembly Products Inc
VERSATRY—Versen (Kurt) Co
Versen (Kurt) Co 4 Slocum Ave Englewood NJ
VERSL—Versen (Kurt) Co
VERSILIER—Keystone Electric Mfg Co
VERSITRAP—Burndy Corp
VERSTRUM—Versen (Kurt) Co
VERTICON—Art Metal Co
VERTOLITE—Linz Material Industries
VI-TITE—Penn-Union Electric Corp
VIBRA-FLOW—Symton Inc
VIBRACODE—Motorola Communications & Electronics Inc
VIBRAPACK—Mallory (P R) & Co Inc
Vibrascope Co P O Box 97 Glenford NY
VIBRO—Burgess Vibrocrafters
VIBROGROUND—Associated Research Inc
VIBROTEST—Associated Research Inc
Vickers Inc Electric Products Div 1847 Locust St Louis 3 Mo
VICON—Insul-8 Corp
VICORAY—Whitaker (Douglas) C Co Inc
VICTOR—Ludlow Mfg & Sales Co
Victor Electric Wire & Cable Corp 618 Main St West Warwick RI
Victor Instrument Mfg Co Inc 33 W 60 St NY 23 NY
Victor Insulators Inc—see I-T-E Circuit Breaker Co
VICTOR JR—Trine Mfg Corp
Victor Specialties 775 Main St New Rochelle NY
VICTOR SR—Trine Mfg Corp
Victor Ventilator Co—see Victor Ventilator Div
Victor Ventilator Div Philip Carey Mfg Co Middle-town Ohio
VIGILROL—Automatic Control Co
VIKING—Mid-States Welder Mfg Co
Viking Air Products 5601 Walworth Ave Cleveland 2 Ohio
Viking Instruments Inc East Haddam Conn
Vimco Mfg Co Inc 105 Brayton St Buffalo 13 NY
VIMCOLIGHT—Vimco Mfg Co Inc
VINSOL—Rusgreen Mfg Co
Virden (John C) Co 5009-6103 Longfellow Ave Cleve-land 3 Ohio
VIS-A-RAY—Duro Test Corp
VIS-O-GLOW—Brach Mfg Co
VIS-O-MATIC—Co-operative Utilities Co Inc
VISA-VOLT—Advance Transformer Co
VISICALL—Sperli Faraday Inc
VISAFLEAME—Mercoird Corp
VISION-AID—Amplex Corp
VISIONAIRE—Silveray Lighting Inc
VISIONAIRE—Sunbeam Lighting Co
VISITRON—Curtis Lighting Div
VISTALITE—Stebber Mfg Co
VISUALIER—Garcy Lighting Div
VISUALITE—Magni Flood Inc
VISUALARM—Crouse-Hinds Co
VITALITE—Adjustable Fixture Co
VITALOY—Billings & Spencer Co
VITREOSIL—Thermal American Fused Quartz Co
VITROHM—Ward Leonard Electric Co
VITROLAIN—Star Porcelain Co
VITRONAMEL—Anaconda Wire & Cable Co
VITROTEX—Anaconda Wire & Cable Co
VIZ-AID—Day-Brite Lighting Inc
VOGUE-LITE—Swiveller Co Inc
Voigt Co 1636 N Carlisle St Phila 2 Pa
VOKALCALL—Auth Electric Co Inc
VOLSEAL—Johns-Manville
VOLT-OHMATIC—Bergen Laboratories
VOLTBOX—Superior Electric Co
VOLTTEST—Davenport Mfg Co

VOLTINE—Waveland Electric Co
VOLTMASTER—Pioneer Gen-E-Motor Co
VON—Hewson Co Inc
VORNADO—Sutton (O A) Corp
VOYCALL—Lake Mfg Co
VU-ALL—Cable Electric Products Inc
VULCAN—Paranite Wire & Cable Div
VULCAN—Williams (J H) & Co
Vulcan Electric Co 88 Holten St Damers Mass
Vulcan Radiator Co 775 Capitol Ave Hartford 6 Conn
VULCAPRENE—Paranite Wire & Cable Div

W

W B—Ware Fuse Corp
WGR—Roller (Wm G) Inc
W & T—Wallace & Tiernan Inc
Waage Electric Inc 720 Colfax Ave Kenilworth New Jersey
Wac Engineering Co—see Wac Line Inc
Wac Line Inc 35 S St Clair St Dayton 2 Ohio
WAC-TAC—Wac Line Inc
Wachs (E H) Co 1525 N Dayton St Chicago 22 Ill
Waco Mfg Co 3565 Wooddale Ave Minneapolis 16 Minn
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky
WAGENSSELL—Acme Mfg & Gasket Co
Wagner Electric Corp 6400 Plymouth Ave St Louis 14 Mo
Wagner Malleable Products Co 222 W Adams St Chi-cago 6 Ill
Wagner Mfg Co Inc—see Lenco Inc
Wahlund (M Paul) Mechanical Laboratory P O Box 16 Grant Iowa
Walsell Co 731 S Water St Vermilion Ohio
Wakefield Brass Co—see Wakefield Co
Walco Electric Co 131 Blackstone St Providence 1 RI
Waldman (John J) Co 477 Atlantic Ave Brooklyn 17 NY
Walker Brothers End St Conshohocken Pa
Walker Div Norma-Hoffman Bearings Corp Stamford Conn
WALKERDUCT—Walker Brothers
WALKERFLEX—Walker Brothers
WALKERINE—Walker Brothers
WALKERPRENE—Walker Brothers
WALKERSYN—Walker Brothers
WALKERZONE—Walker Brothers
WALKIE-WORKLIFTER—Economy Engineering Co
Walkirt Co 141 W Hazel St Inglewood 3 Calif
Wall (P) Mfg Co P O Box 71 Grove City Pa
WALL-AIRE—Freshnd-Aire Div
WALL FIN—Trane Co
WALL LINE—Trane Co
Wallace & Tiernan Inc 25 Main St Belleville NJ
WALLGRIP—Star Expansion
WALLO—Wall (P) Mfg Co
WALLURNLITE—Gruber Bros Inc
WALLY—Holub Industries Inc
Walser Automatic Timer Corp 420 Lexington Ave New York 17 NY
Walton Laboratories Inc 1186 Grove St Irvington 11 NJ
Wama Co Industrial Bldg Baltimore 2 Md
Ward Leonard Electric Co 28 South St Mount Vernon NY
Ware Bros—see Ware Fuse Corp
Ware Fuse Corp 4400 W Lake St Chicago 24 Ill
WAREHOUSER—Yale & Towne Mfg Co
Warner Electric Brake & Clutch Co Beloit Wis
Warren Lamp Co—see Solar Electric Co
Warrick (Chas F) Co 1964 W Eleven Mile Rd Berkley Mich
WARWICK—Hayden Twist Drill Co
Washington Aluminum Co Inc Knecht Ave & Penn-sylvania R R Baltimore 29 Md
WATCH DOG—General Electric Co
WATCHMASTER—Carpenter Mfg Co
Waterman Products Co Inc 2445-63 Emerald St Phila 25 Pa
WATERSEAL—Thomas & Betts Co
WATERTITE—Okonite Co
WATERTITE—Woodhead (Daniel) Co
Watlow Electric Mfg Co 1376 Ferguson Ave St. Louis 14 Mo
Watteredge Co 19629 West Lake Rd Rocky River 16 Ohio
Waukesha Motor Co Waukesha Wis
Wavelength Electric Co 5542 N Ashland Ave Chicago 40 Ill
WEATHER-CHRON—Automatic Devices Co Inc
WEATHER DUTY—Westinghouse Electric Corp Lamp Div
WEATHER-FLO—Automatic Devices Co Inc
WEATHER-MAN—Automatic Devices Co Inc
WEATHERLOC—Continental Electric Equipment Co
WEATHERMAKER—Carrier Corp
WEATHERMASTER—Carrier Corp
WEATHERMASTER—Stebber Mfg Co
WEATHERTRON—General Electric Co
Weaver (J A) Co 2110 Howard St St Louis 6 Mo
Webb Electric Mfg Co 1701 S W Jefferson St Port-land 1 Ore
Webster Electric Co 1900 Clark St Racine Wis
WEDGE-GRIP—Sherman (H B) Mfg Co
WEDGE-ON—Thomas & Betts Co
WEDGE-TITE—Kearney (James R) Corp
WEDGELOCK—Adalet Mfg Co
WEDGE—Insulation Mfrs Corp
WEDGTITE—Crouse-Hinds Co

WEED KUTTER—International Electric Fence Co Inc
Weiss and Biheller Merchandise Corp 584 Broadway
NY 12 NY

WEJ-IT—Kirel Inc

Wej-Lock Mfg Co—see Grip-Tite Mfg Co

Weksler Instrument Corp 195 E Merrick Rd Freeport
LI NY

Weksler Thermometer Corp—see Weksler Instrument Co
Weilburt Corp 57-18 Flushing Ave Maspeth 78 LI
NY

Welch Mfg Co—see Raydome Corp

WELCAME-LIGHT—Calumet Plastics Inc

Welcraft Products Co Inc New Carlisle Ind

WELDANPOWER—Lincoln Electric Co

WELDOX—Hardman (H V) Co Inc

WELDPPOWER—Raytheon Mfg Co

Welduction Corp 10230 Capital Ave Detroit 37
Mich

Weller Electric Corp 601 Stone's Crossing Rd Easton
Pa

Weller Mfg Co—see Weller Electric Corp

Wellington Machine Co 133 De Wolf St Wellington
Ohio

Wells Mfg Corp 250 Service Rd Three Rivers Mich

WELLSAW—Wells Mfg Corp

WELTRONARC—Weltronic Co

Weltronic Co 19500 W Eight Mile Rd Detroit 41
Mich

Wen Products Inc 5808 Northwest Highway Chicago
31 Ill

WESCO—Westinghouse Electric Supply Co

West Electric Heater Co 390 First St San Francisco
5 Calif

West Instrument Corp 4363 W Montrose Ave Chicago
41 Ill

West Wind Corp 1800 Airport Way Seattle 4 Wash

Westchester Brickote Products Co Inc 1528 Wil-
lamsbridge Rd NY 61 NY

Western Electro-Mechanical Co Inc 300 Broadway
Oakland 7 Calif

Western Gear Corp Electro Products Div 132 W
Colorado St Pasadena 1 Calif

Western Insulated Wire Co 2425 E 30th St Los
Angeles 58 Calif

Western Plastics Corp 1515 W Second St Hastings
Nebr

Western States Eqt Co P O Box 7211 Oakland 1
Calif

Westinghouse Electric Corp P O Box 868 Pittsburgh
30 Pa

Westinghouse Electric Corp Lamp Div Bloomfield NJ

Westinghouse Electric Corp Lighting Div 1216 W
58th St (P O Drawer 5817) Cleveland 1 Ohio

Westinghouse Electric Corp Standard Control Div
Beaver Pa

Westinghouse Electric Corp Sturtevant Div Damon St
Hyde Park Boston 36 Mass

Westinghouse Electric Supply Co 3 Gateway Center
(Box 448) Pittsburgh 30 Pa

Westline Products Div Western Lithograph Co 600 E
Second St Los Angeles 54 Calif

WESTON—Round (David) & Son Inc

Weston Electrical Instrument Corp—see Weston In-
struments

Weston Instruments Div of Daystrom Inc 614 Fre-
linghuysen Ave Newark 12 NJ

WETOIL—Farrelly Co

WEYCO—Young Electric & Mfg Co Inc

WHEAT—Koehler Mfg Co

Wheat Laboratories—see Koehler Mfg Co

WHEEL-ABOUT—Rich (Phil) Fan Mfg Co Inc

Wheeler Electronic Corp 150 E Aurora St Water-
bury 20 Conn

Wheeler Insulated Wire Co—see Wheeler Electronic Corp

Wheeler Mfg Co—Ross Rd Ashtabula Ohio

Wheeler Reflector Co 275 Congress St Boston 10
Mass

Wheelock Signals Inc Branchport Ave Long Branch NJ

WHIRLPOOL—Standard Electric Mfg Co Inc

Whirlpool Corp St Joseph Mich

Whirlpool-Seger Corp—see Whirlpool Corp

Whitaker (Douglas C) Co Inc 141 E Glenside Ave
Glenside Pa

Whitaker Reel Mfg Co 3704 Jackson St (P O Box 1318)
Monroe La

White (O C) Co 15-21 Hermon St Worcester 2 Mass

White-Rodgers Co 1209 Cass Ave St Louis 6 Mo

Whitman & Barnes Div United Drill and Tool Corp
40603 Plymouth Rd Plymouth Mich

Whitney Blake Co 102 Pershing St New Haven 14
Conn

WHIZ—Crown Industrial Products Co

WHIZ—Speedex Mfg Co

WICK-O-LITE—North American Electric Lamp Co

WIDE-SPREAD—Holograph Co Inc

WIDE-VUE—Simpson Electric Co

Wiegand (Edwin L) Co 7637 Thomas Blvd Pitts-
burgh 8 Pa

WIL-GARD—Wilson Rubber Co

Wil-Son Mfg Co Cloverport Ky

Wilbur & Williams Co Inc 650 Pleasant St Norwood
Mass

Wilde Drop Forge & Tool Co—see Wilde Tool Co Inc

Wilde Tool Co Inc Hiawatha Kans

Wilder Mfg Co Inc Mechanic St & Erie Railroad
Port Jervis NY

Wiley Displays Inc—see Wiley (R & W) Inc

Wiley (R & W) Inc Dearborn & Bridge St Buffalo 7 NY

Wilhoff (M J) Co 823 Locust Pittsburgh 19 Pa

Willard Storage Battery Co—see Willard Storage Bat-
tery Div Pa

Willard Storage Battery Div Electric Storage Battery
Co 246-286 E 131 St Cleveland 8 Ohio

Williams (J H) & Co 400 Vulcan St Buffalo 7 NY

Williams (Hugh B) Mfg Co 8330 Lovett St (P O
Box 7815) Dallas Tex

Williams (H E) Products Co 106 S Main St Carthage
Mo

Wilmington Fibre Specialty Co New Castle Dela

Wilmot Castle Co 1928 E Henrietta Rd Rochester NY

Wilson (G C) & Co 1915 Eighth Ave Huntington
W Va

Wilson-Albrecht Co Inc—see Waco Mfg Co

Wilson (J A) Lighting & Display Inc 1502 Industrial
Dr Erie Pa

Wilson Rubber Co 1200 Garfield Ave S W Canton 6
Ohio

Wincharger Corp E Seventh & Division St Sioux
City 2 Iowa

WINCO—Wincharger Corp

WIND-ELECTRIC—Hirschman-Pohle Co Inc

WIND-O-VENT—Reef Unit-Fans Inc

Wind-Way Fan & Ventilator Co 531 St Joseph St
New Orleans 12 La

WINDMAKER—Rich (Phil) Fan Mfg Co Inc

WINDOLITE—Light & Power Utilities Corp

WINDOW WONDER—Rich (Phil) Fan Mfg Co Inc

WING-DING—Diamond Expansion Bolt Co Inc

Wing (L J) Mfg Co 303 N Stiles St Linden NJ

WINGFOIL—Wing (L J) Mfg Co

WINGJET—Wing (L J) Mfg Co

Winpower Mfg Co Newton Iowa

Winterburn Mfg Co P O Box 386 Putnam Conn

WIRE-LESS-COM—Simpson (Mark) Mfg Co Inc

WIRE-LUBE—Ideal Industries Inc

WIRE MIKE—Sundry Corp

WIRE-NUTS—Ideal Industries Inc

WIRE WATT—Ohmite Mfg Co

WIRED HEAT—West Electric Heater Co

WIREDUCT—Wiremold Co

WIRELESSPHONE—Simpson (Mark) Mfg Co Inc

WIRELESS TALK—Simpson (Mark) Mfg Co Inc

Wiremold Co Hartford 10 Conn

WISCAL—Wisconsin Electrical Mfg Co Inc

WISCO—Wisconsin Storage Battery Co

Wisconsin Carbon Corp—see Kirkwood Carbon Corp

Wisconsin Electric Co—see Dumore Co

Wisconsin Electrical Mfg Co Inc 1237 S Third St
Milwaukee 4 Wis

Wisconsin Storage Battery Co 1222 18th St Racine
Wis

Wiss (J) & Sons Co 33 Littleton Ave Newark 7 NJ

WIZARD—General Control Co

Wodack Electric Tool Corp 4627 W Huron St Chi-
cago 44 Ill

WOLMANIZED—Koppers Co Inc

WONDABAR—Virden (John C) Co

WONDER—American Pipe Bending Machine Co Inc

WONDERFLUX—American Silver Co Inc

WONDERLITE—Magni Flood Inc

Wood Specialty Mfg Co—see General Cement Mfg Co

Woodhead (Daniel) Co 15 N Jefferson St Chicago 6
Ill

Woodward Machine Co Lighting Div 4833 Elmhurst
Detroit 4 Mich

WORK BULL—Massey-Ferguson Industrial Div

Work-O-Lite Co 522 Cortlandt St Belleville 9 NJ

Workrite Mfg Co 612-620 Colorado Ave Santa
Monica Calif

WORKSAVER—Yale & Towne Mfg Co

Worner Electronic Devices Rankin Ill

Worthington Corp Worthington Ave Harrison NJ

WRAP-CAP—Ideal Industries Inc

WRAP-IT-HEAT—Acra Electric Corp

Wrap-On Co 341 W Superior St Chicago 10 Ill

WRIGHT CIRCUIT—Electric Controller & Mfg Co

Wright Hoist Div American Chain & Cable Co Inc
Franklin & Hay Sts York Pa

Wrought Washer Mfg Co 2280 S Bay St Milwaukee
7 Wis

WYCO—Wyzenbeek & Staff Inc

WYTELINER—Guth (Edwin F) Co

Wyzenbeek & Staff Inc 223 N Carolina Ave Chicago
12 Ill

X

XL—Excel Fuse Co

X-L—Henderson Electric Co

X-Ray Reflector Co—see Curtis Lighting Div

X-TRACT-O—Trico Fuse Mfg Co

X-VAR—Fidelity Chemical Products Corp

XCEL—Xcelite Inc

Xcelite Inc Thorne Ave at Bank St Orchard Park NY

XELON—Times Wire & Cable Co

XIT—Iona Ventilator Co Inc

Y

Y-ER-EAS—Electro Compound Co

YAGER—Benson (Alexander R) Co Inc

YAK—Mercury Mfg Co

Yale & Towne Mfg Co 11000 Roosevelt Blvd Phila-
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Yardney Electric Corp 40-50 Leonard St New York
13 NY

Yardney International Corp—see Yardney Electric Corp

Yardney Laboratories Inc—see Yardney Electric Corp

Yeats Appliance Dolly Sales Co 2124 N 12th St Mil-
waukee 5 Wis

Yellow Springs Instrument Co Inc P O Box 106 Yel-
low Springs Ohio

YOLVO—Youngstown Sheet & Tube Co

York Corp—see York Div

York Div Borg-Warner Corp Grantley Rd York Pa

York Ice Machinery Corp—see York Div

York Mfg Co—see York Div

YORKAIRE—York Div

Yorkville Metal Products Co 677 Broadway NY 12
NY

Young Bros Co 1831 Columbus Rd Cleveland 13 Ohio

Young Electric & Mfg Co Inc 2134 Curtis Denver 2
Colo

Young Engine Corp P O Box 532 Canton Ohio

YOUNG MODERNS—Lightolier Inc

YOUNGSTOWN—Electric Controller & Mfg Co

Youngstown Sheet and Tube Co P O Box 900 Youngs-
town 1 Ohio

YUKOW—Perfclite Co

Z

ZAMPA—Weiss & Biheller Merchandise Corp

Zell-Aire Corp Orrton Ave Reading Pa

Zenith—Scranton Storage Battery Corp

Zenith Electric Co 155 W Walton St Chicago 10 Ill

ZEPHAIR—Hunter Div

ZEPHYR—Chester Hoist Div

Zernickow (O) Co 15 Park Row New York 38 NY

ZINC-SHIELD—Wilbur & Williams Co

Zinco Electrical Products 729 Turner Los Angeles
12 Calif

Zinsmeyer Co—see Zinsco Electrical Products

ZIP SPOT—Mid-States Welder Mfg Co

ZIPPDUCT—Zippertubing Co

ZIPPERTUBING—Illumitronic Engineering

Zippertubing Co 752 S San Pedro Los Angeles 14
Calif

ZIPPWRAP—Zippertubing Co

ZIPSOL—Fidelity Chemical Products Corp

ZONALARM—Edwards Co Inc

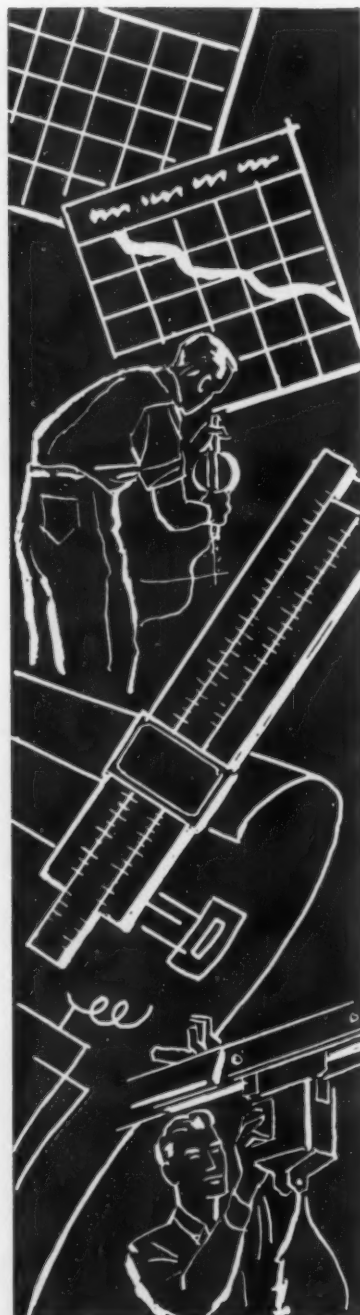
ZOREX—Adjustable Fixture Co

PRODUCT SELECTION DATA

Detailed information on electrical products

This section contains data presented by manufacturers of electrical apparatus and supplies, utilization equipment, components, tools and accessories. Descriptions include installation and application data, performance characteristics and specifications.

Bold-face type and the symbol (●) are used in the Product Directory to indicate the location of information on specific equipment in this section.





the

**HELPING
HAND**

on

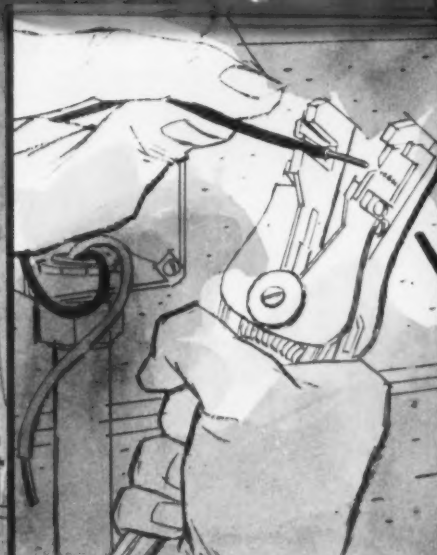
**EVERY
WIRING JOB**



Wire Pulling



Wire Lubrication



Wire Stripping



TOOLS MAKE AND

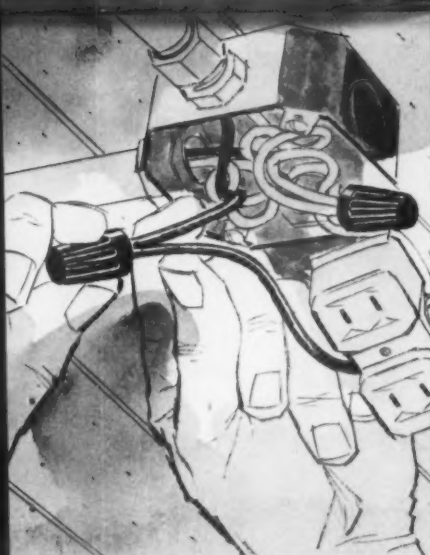


From the makers of the original "Wire-Nuts" wire connectors comes a complete line of carefully engineered and constructed tools to make the electrician's job safer, easier and more efficient.

Truly an extra hand on any wiring job, IDEAL tools are simple to use and inexpensive, yet meet highest safety standards. Planned for specific needs, IDEAL tools help the electrician avoid skinned knuckles, damaged insulation, kinked wires, and exasperation.

IDEAL supplies everything from drills for cutting through masonry walls, right up to maintenance equipment such as fuse pullers and circuit testers.

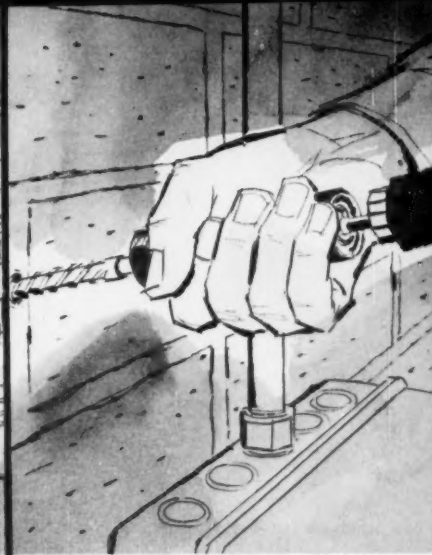




Wire Connecting



Circuit Testing



Masonry Drilling

THE ELECTRICIAN'S JOB SAFER EASIER FROM START TO FINISH

Tough muscle-straining jobs like pulling wire through long runs of conduit become amazingly simple with IDEAL fish tape, reels and pullers. For exceptionally difficult jobs, a little IDEAL "Wire Lube" lubricates the wire for slick, speedy pull through. IDEAL wire guides protect insulation from rough conduit edges and help assure meeting of rigid codes and standards.

To finish the job, IDEAL supplies wire strippers, pliers, and cable strippers and varieties of wire connectors to fit every electrician's preference, be it "Wrap-Cap" crimp connectors, set-screw connectors, "Wire-Nut" or "Wing-Nut" connectors.

get IDEAL tools
through your local
electrical distributor





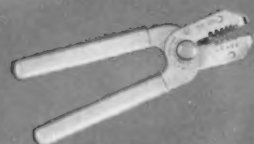
Fish Tape, Reel and Winder
IDEAL fish tape on easy-to-grip reel and puller gives safe positive grip without danger of bending or kinking. Shown with optional winder.



"Wire Lube"
Apply by hand or brush as cable is pulled into conduit. Protects insulation. Dries quickly to a fine powder. No residual sludge.



"Test Glo"
For testing circuits, motors, fuses, etc. Neon test lamp at front of handle, glows on voltages from 80 to 600 volts a-c or d-c.



T-Type Wire Strippers
Easy-to-Use and inexpensive, strips, cuts and loops wires from 10 to 26 gauge cleanly, quickly and easily.



Stripmaster
Strips both solid or stranded wire in just one 2-second squeeze. Won't nick wire or crush wire ends. Available for gauges 8 through 30.



Fuse Puller & Testlite
Dielectric plastic molded grips make fuse pulling safe and effortless. Test prods on opposite end fit parallel and tandem slot receptacles.



Continuity Tester
Battery powered, pocket sized unit does away with need to apply line voltage to unknown or untested circuits. For testing control panels, communication equipment, etc.



Voltage Tester
Double protection solenoid indicator moves on easy-to-read calibrated scale. Neon lamp operates separately, shows type of current. Built for working electricians' use.

IDEAL

the
**HELPING
HAND
ON
EVERY
WIRING JOB**



Electricians Pliers
This all-in-one tool serves both as a crimper for Ideal Crimp Connectors and as a rugged, pair of electricians pliers. Twists, cuts wire—deburs conduit.

NEW



"Wing-Nut" Connectors
Easiest connector for branch circuit wiring. Wing grip is built-in wrench. Actually see splice inside semi-transparent Nylon shell. U.L. listing for 600V Pressure Cable Connector.



"Wrap-Cap" Crimp Connector
Insulates all around the electrical joint and between the wires. Gives double thickness protection over sleeve and wire ends. 600 V. listing for pressure cable connectors, branch and fixture.



"Wire-Nut" Connectors
The simplest, safest way to make pigtail splices. Just screw "Wire-Nuts" on like a nut on a bolt. No solder or tape needed. 600 V. listing for pressure cable connector, branch and fixture.

IDEAL INDUSTRIES, INC. 1041-I Park Avenue, Sycamore, Illinois



Gentlemen,

Please send catalog sheets and promotional information on the following tools.

- | | | |
|---|--|---|
| <input type="checkbox"/> "Wire Lube" | <input type="checkbox"/> T-Type Wire Stripper | <input type="checkbox"/> Fish Tape, Reel and Winder |
| <input type="checkbox"/> "Test-Glo" | <input type="checkbox"/> Electricians Pliers | <input type="checkbox"/> Fuse Puller and Testlite |
| <input type="checkbox"/> Voltage Tester | <input type="checkbox"/> Continuity Tester | <input type="checkbox"/> "Wrap-Cap" Crimp Connector |
| <input type="checkbox"/> "Stripmaster" | <input type="checkbox"/> "Wing-Nut" Connectors | <input type="checkbox"/> "Wire-Nut" Connectors |

Buy These
IDEAL Tools
Through Your
Local Electrical
Distributor

NAME _____ TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

Printed in U.S.A.

Electrical contractor
speeds installation with
Westinghouse preplanning service



YOU CAN BE SURE...IF IT'S **Westinghouse**

COVER PHOTO: Newest face on the downtown Miami skyline is the 18-story First National Bank Building, headquarters for Florida's largest and Miami's oldest bank. The first three floors are bank offices and facilities and 13 of the 15 floors in tower are rental area.

Proof and Transit Department of bank can clear over 8 million checks, drafts and money orders per month. This operation, which includes 31 electric sorting machines going day and night, demands dependable, uninterrupted electrical service.

Edward Clarke, Project Manager for Rooney-Turner, General Contractors; H. E. Magann, WESCO Manager; and George J. Meinich, Vice President of L. K. Comstock Co., Inc., Electrical Contractors, review blueprints of new bank and commercial office building. Working together on this job, they found that they were able to keep well within the allotted time schedules.



No delay in The First National Bank of Miami job— because contractor, distributor and Westinghouse preplanned the installation

The First National Bank of Miami recently opened for business in the third new building they have occupied in their 56-year history. As before, this move was made necessary because of increased business and growth of their services.

Westinghouse equipment, used in all parts of the building, assures complete and adequate electrical service for highly electrified banking operation and the tenants throughout the building.

The owner, the architect-engineer and the contractor considered construction scheduling as a profit-or-loss factor. They all welcomed the opportunity to work with the Westinghouse distributor and product specialist in careful preplanning of all phases of the electrical installation. Electrical need now and for the future was carefully considered.

Westinghouse products were selected and specified because of system adaptability, quality and ease of installation. The electrical installation went off without a hitch and was completed with-

in the schedule made necessary by other construction, because the electrical contractor and the Westinghouse distributor were able to preplan and schedule deliveries.

The heart of the building's electrical system is a Westinghouse building-type switchboard which protects the circuits distributed at 277/480 volts. Three parallel runs of Westinghouse bus duct serve as main feeders in a vertical-rise design. On each floor, electrical closets house Westinghouse dry-type transformers—for step-down to 120/208 volts—and distribution through Westinghouse panelboards.

(continued)

YOU CAN BE SURE...IF IT'S **Westinghouse**

S Over 250 Pages Westinghouse Data in Sweet's Construction File.

George Meinch shows H. E. Magann and Edward Clarke Westinghouse lighting panelboards concealed behind hinged wall in ultramodern bank cafeteria. Panelboard on left is Type NLAB, 120/208-volt, 3-phase, 4-wire unit; other is Type NH1B, 277/480-volt.

Charles W. Butsch, Westinghouse product specialist, points out Westinghouse bus duct advantages to prospective tenant. Low-impedance bus duct connects incoming power to Westinghouse switchboard. Space-saving Westinghouse DT-3, 45-kva, dry-type transformer (foreground) is rated at 480-120/208 volts. Main disconnect safety switches are Type CAF, 100- and 200-amp.



continued . . . **Electrical contractor—
Westinghouse speed installation**

Successful contractors have found that selection of all-Westinghouse equipment, plus localized service, greatly increases installation efficiency. Westinghouse can help with any phase of your electrical planning and construction. Ask the Westinghouse distribution outlet near you, or write Westinghouse Electric Corporation, Box 868, Pittsburgh 30, Pennsylvania. J-94121

OWNER: The First National Bank of Miami, Miami, Fla.
ARCHITECT-ENGINEER: Weed-Johnson Assoc., Miami, Fla.
CONSULTING ENGINEER: Norman J. Dignum & Assoc., Miami, Fla.
GENERAL CONTRACTOR: Rooney-Turner (Frank J. Rooney, Inc., Miami, Fla., and Turner Construction Co., New York, N. Y.)
ELECTRICAL CONTRACTOR: L. K. Comstock Co., Inc., Miami, Fla.
WESTINGHOUSE DISTRIBUTOR: Westinghouse Electric Supply Co., Miami, Fla.

William Bausch, Bank's Electrical Supervisor, operates Westinghouse Type NLAB panelboard distributing 120/208 volts throughout the floor. Three vertical runs of 600-amp Life-Line® busway provide 277/480 volts to each electrical closet. Lightweight, wall-mounted dry-type transformers step down distribution voltage from plug-in circuit breaker protective devices to 120/208 volts.

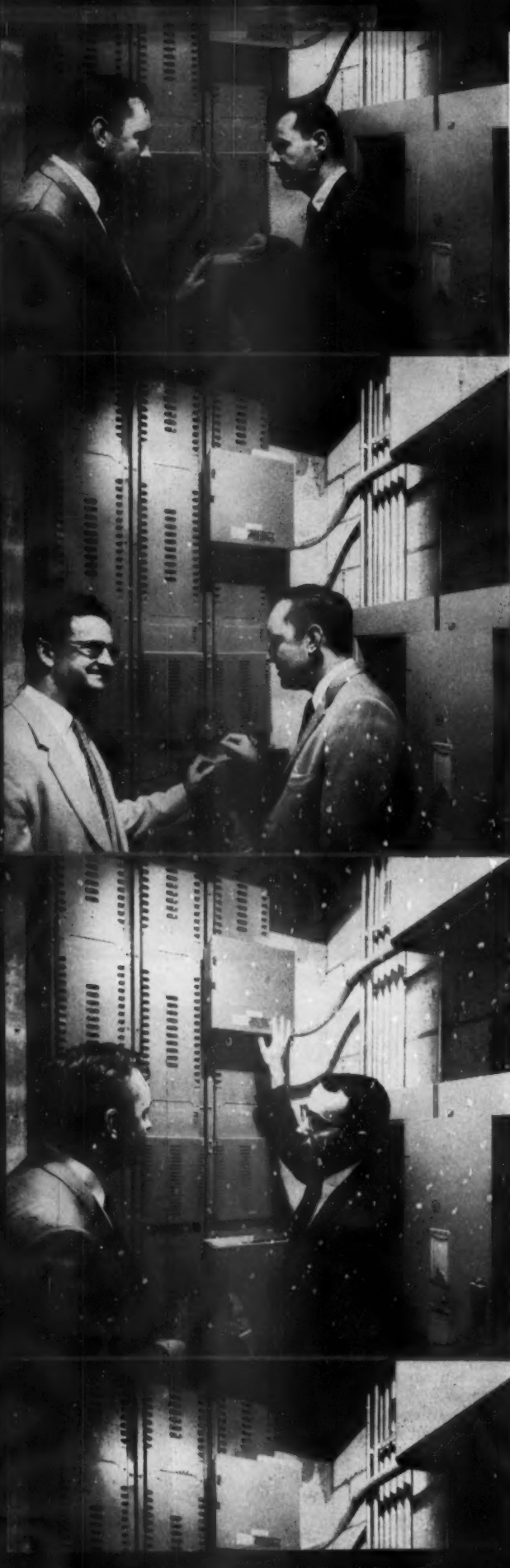
George Meinch, center, explains to Charles C. Gaines, bank staff member (left), and Edward Clarke the dead-front construction of the Westinghouse building-type switchboard which assures complete safety of operation. Note blank sections allowed for future growth.

S Over 250 Pages Westinghouse Data in Sweets' Construction File.

YOU CAN BE SURE...IF IT'S Westinghouse

WATCH "WESTINGHOUSE LUCILLE BALL-DESI ARNAZ SHOWS" CBS TV MONDAYS





New Miami bank building gets

13 floors of full power with Westinghouse bus duct

NO APPRECIABLE POWER LOSSES
FROM FLOOR TO FLOOR—CONVENIENT
PLUG-INS MAKE EVERY FLOOR A POWER STATION

"Power closets" on 13 floors of the new
First National Bank Building give
each floor *full electrical power*—with no
appreciable power loss even on the topmost level.

Convenient power-taps make every floor a power station.
No splicing or cutting—just plug into the
busway—take off full power.

The Westinghouse busway run in this new building
is over 550 vertical feet—supplies all of the lighting
power demands of the building, plus numerous
business machines. These three vertical rises
are 600-amp, 277/480-volt, 3-phase, 4-wire.

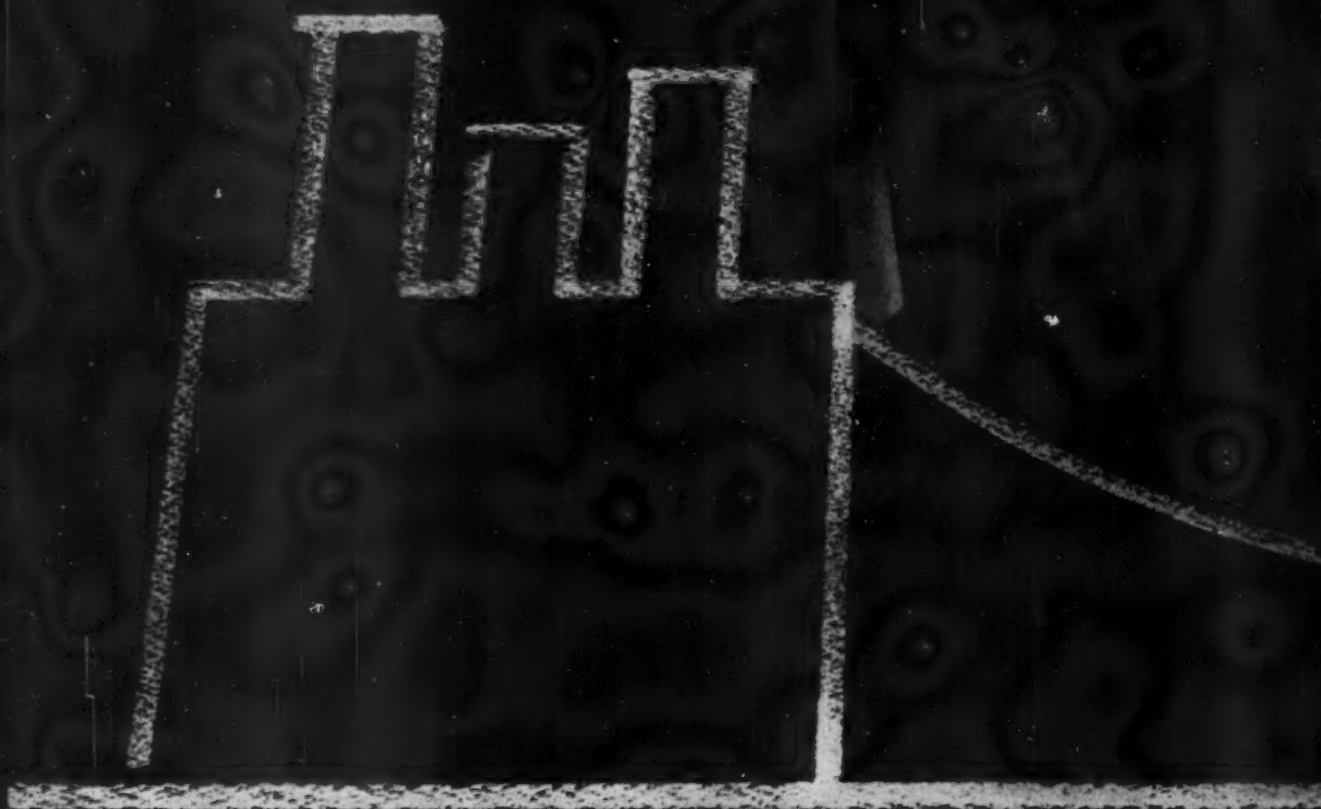
For the complete story on Westinghouse bus duct
for commercial or industrial buildings (low-impedance,
plug-in and Life-Line®), contact your nearby
Westinghouse sales office. Or write: Westinghouse
Electric Corporation, Standard Control Division,
Beaver, Pennsylvania.

J-30293



YOU CAN BE SURE...IF IT'S **Westinghouse**
WATCH "WESTINGHOUSE LUCILLE BALL-DESI ARNAZ SHOWS" CBS TV FRIDAYS

Power plant to substation:



New area for profit?

Now you can *profitably* run power from industrial power plants to unit substations!

Rome's interlocked armored cable takes a lot of the time and labor out of primary feeder installation. As a result, more and more contractors are doing business at the *power source!*

EASY TO INSTALL Because it is highly flexible, interlocked cable goes in fast—around corners, machines, or other obstructions—indoors or out. You can install it in a fraction of the time required for conventional conduit systems. What's more, new circuits are easy to add to existing runs.

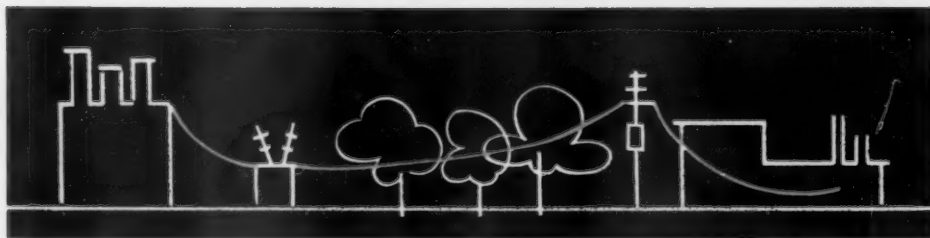
EASY TO SERVICE You can make inspections easily—cables are fully accessible on open cable-supporting ladders, racks or troughs. No need to pull out the cable as you do with conduit. In the event of accidental damage, you merely cut out a short section and splice.

TOUGH, CORROSION-RESISTANT Metallic armor of aluminum alloy, bronze or galvanized steel provides a high degree of mechanical protection. The insulations used on Rome's interlocked armored cable are heat-, moisture-, and ozone-resistant—able to stand up in any climate or industrial atmosphere.

OTHER ADVANTAGES: Interlocked takes less space—almost one inch less space for each 3/c 500 MCM interlocked cable than for conduit-type installations. Plus, you can carry more current, because heat is transferred directly into the air, not trapped in the conduit.

Rome's interlocked armored cable is available in three-conductor construction, rated at 600, 5000 to 15,000 volts. You can get all the details in Bulletin RCP 730. Clip and mail the coupon for your copy.





Power source to plant—Rome Cable gives you the *right* answer to every wiring problem. Power station to substation: Rome's interlocked armored cable "installs like cable, protects like conduit." Substation to plant or refinery: Rome's preassembled aerial cable goes up fast—even through trees—and is well protected from storms. Inside plant or refinery: Rome Synthinol gives maximum corrosion resistance, assures dependable service.

ROME CABLE

Department 7-9, Rome, N. Y.

☐ Please send me more information on the above.

Name.....

Title.....

Company.....

Street.....

City..... Zone..... State.....



**MEET
THE
MAN**

WHO'S
DEDICATED
TO YOUR JOB
YOUR
ROME CABLE
SALESMAN

Substation to industrial plant:



Don't let the trees get in your way!

En route from substation to industrial plant, this power line passes through trees.

A storm . . . a falling branch . . . and pffff! No power. Production stops.

HOW TO PREVENT IT Underground? Not necessary. Just install Rome's preassembled aerial cable. Falling branches—even some trees—can be supported by the cable itself. Come storm or sleet, the cable *stays up*, the plant stays powered up!

REDUCES TREE TRIMMING With Rome's preassembled aerial cable, you blaze a smaller path, reduce initial and periodic tree trimming to a minimum. In one installation, tree trimming wasn't required for five years, in contrast to the normal two-year period required for open-wire systems.

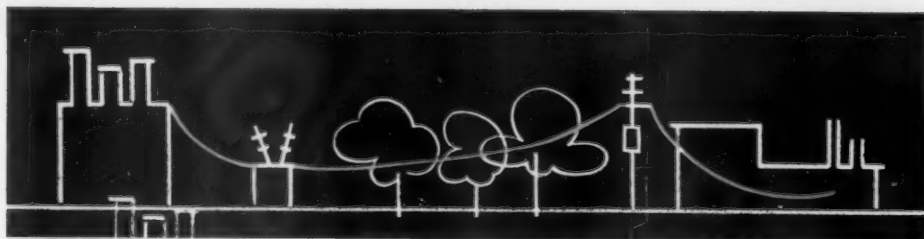
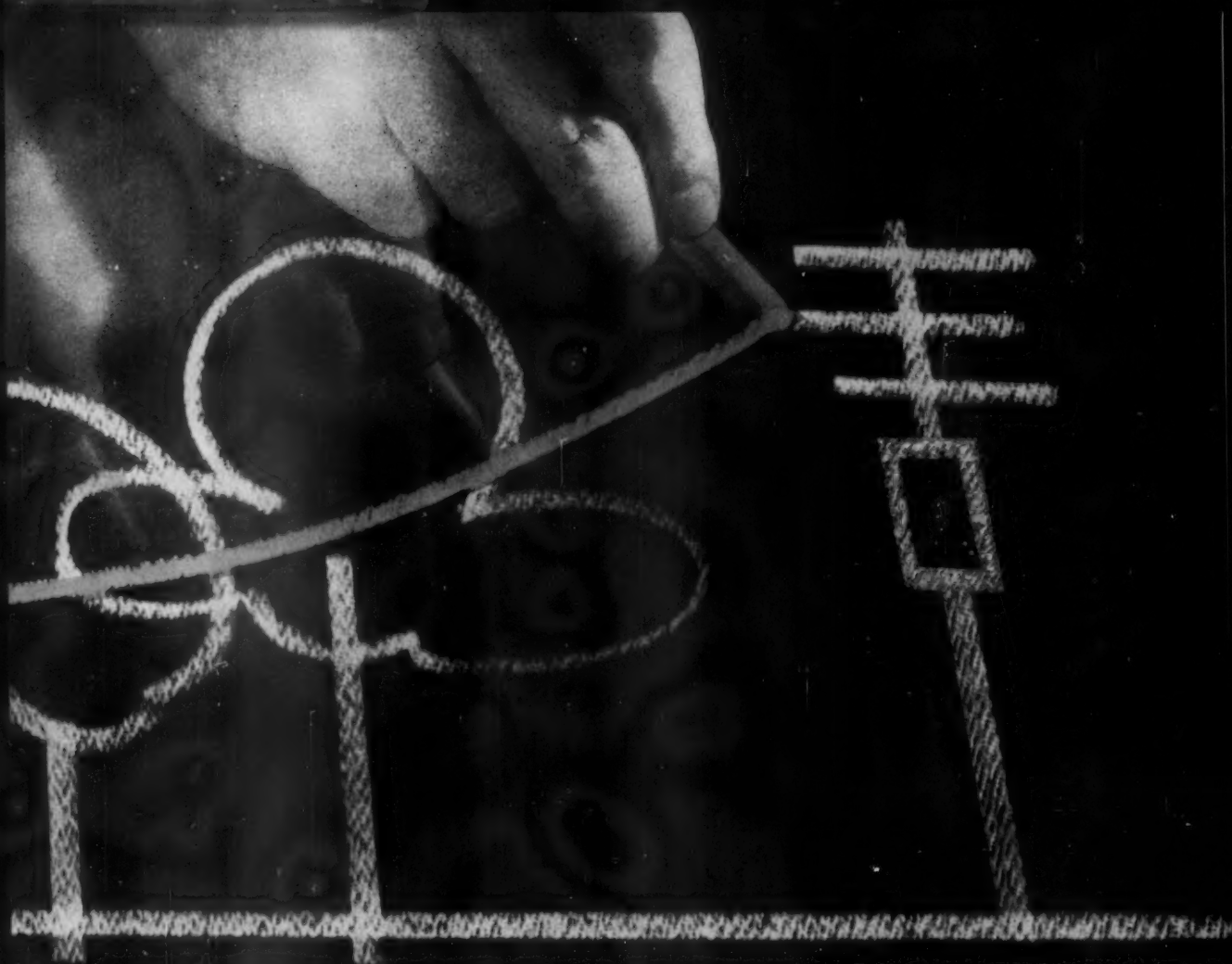
EASE OF TAPPING The reverse-lay construction of Rome's preassembled cable permits tapping anywhere along the line instead of just at poles.

IMPROVED REGULATION Aerial cable has a lower reactance than open-wire systems—so voltage drop is approximately half as great. Similarly, for a given allowable voltage drop, power can be transmitted twice as far.

NO CROSSARMS NEEDED Installation is simple; you don't need crossarms. Appearance is neat, modern, uncluttered.

The coupon on these pages will bring you a copy of Rome's new bulletin on preassembled aerial cable. All the details are in the bulletin. Clip the coupon and mail it for your copy.





Power source to plant—Rome Cable gives you the *right* answer to every wiring problem. Power station to substation: Rome's interlocked armored cable "installs like cable, protects like conduit." Substation to plant or refinery: Rome's preassembled aerial cable goes up fast—even through trees—and is well protected from storms. Inside plant or refinery: Rome Synthinol gives maximum corrosion resistance, assures dependable service.

ROME CABLE

Department 7-9, Rome, N. Y.

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Name

Title

Company

Street

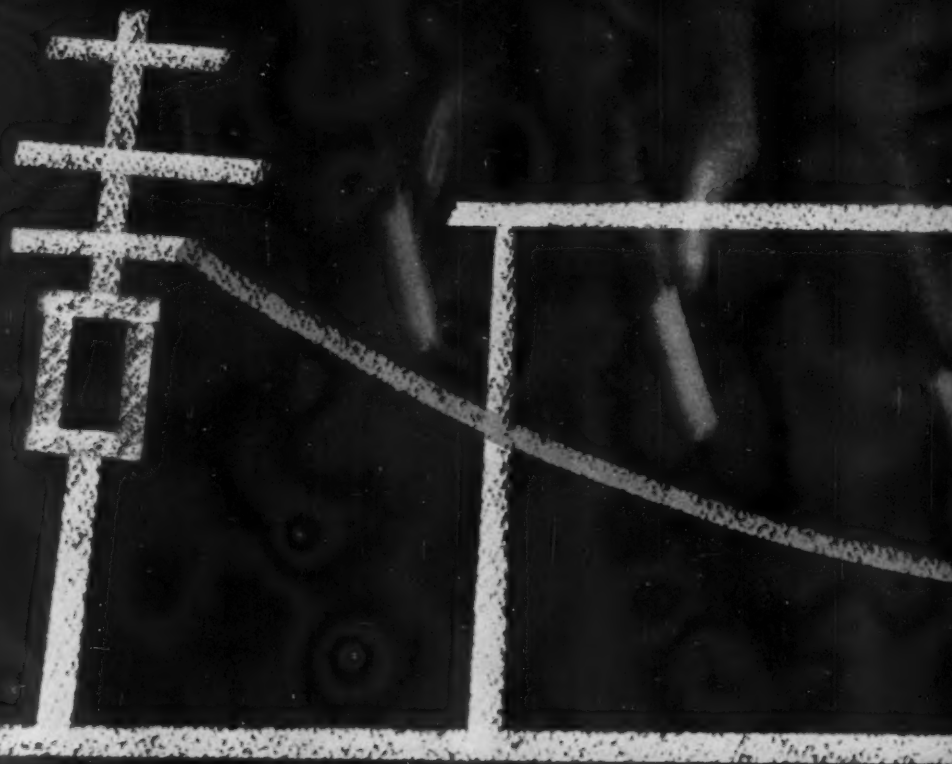
City Zone State



**MEET
THE
MAN**

WHO'S
DEDICATED
TO YOUR JOB
YOUR
ROME CABLE
SALESMAN

Inside plants and refineries:



What can you do about moisture, oil or corrosives that attack your wiring?

One refinery actually tested the corrosion resistance of building wire *on the job*:

Regular TW . . . neoprene-covered . . . braided rubber-insulated . . . lead-covered . . . and Rome Synthinol 901!

RESULT: Only Synthinol 901 and the lead-covered wire held up under exposure to corrosives.

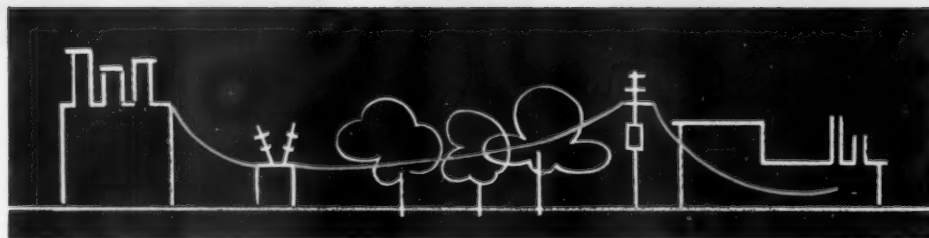
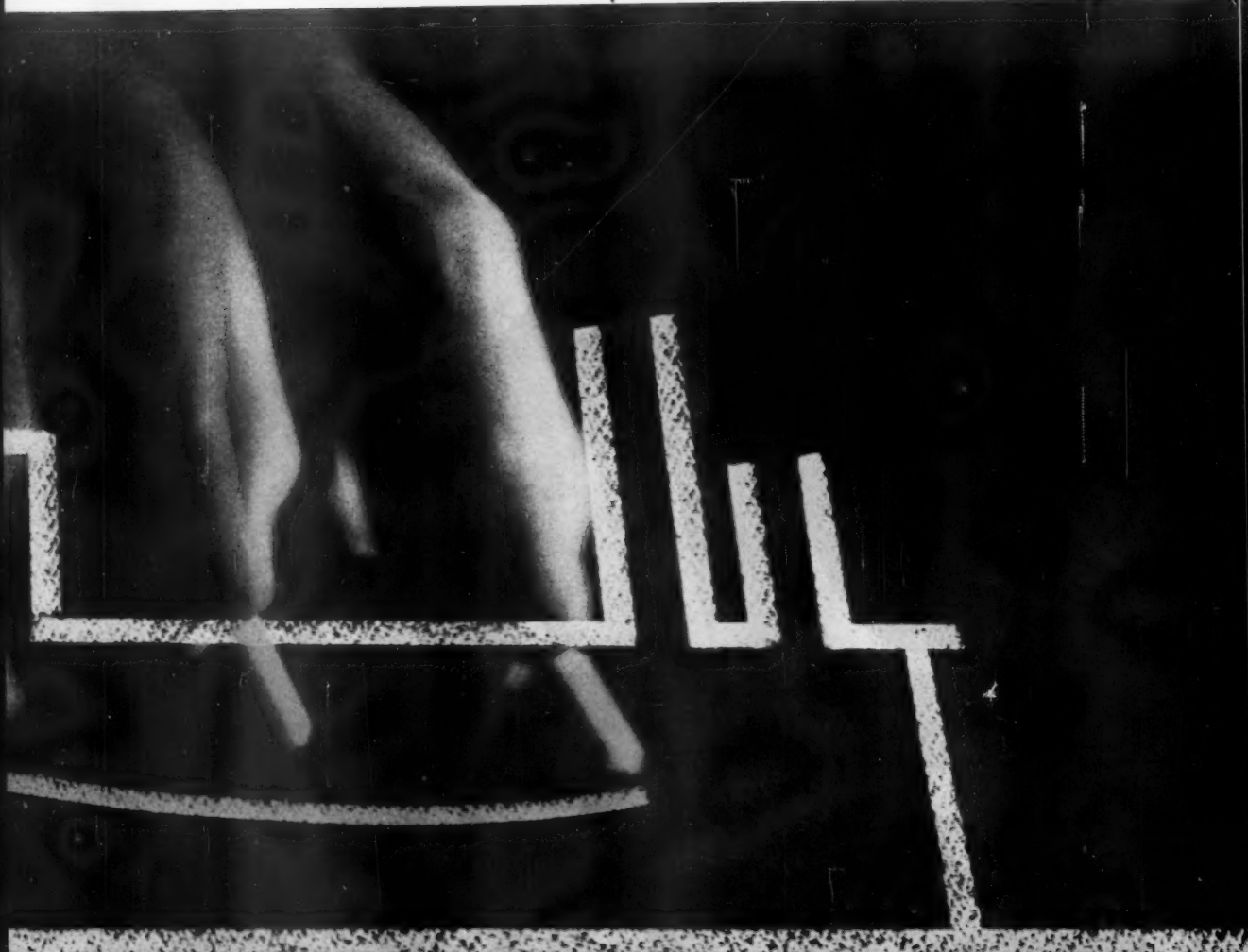
BEST BUY: Rome Synthinol—lower in cost and easier to handle than lead-covered wire.

Synthinol[®] 901 has been proved in the lab and on the job for its resistance to moisture, oil and corrosive vapors. You can recommend it to your industrial customers for any low-voltage application—600 volts and under—including control circuits, plant and refinery equipment, and general wiring of office and warehouse buildings.

Where higher than normal heat conditions exist, you can recommend Synthinol 901 for its superior heat-deformation resistance. You can even use it to replace varnished cambric insulation on oil-filled transformer leads, where the leads are constantly immersed in hot oil.

Get further information, including lab test results, on Rome Synthinol 901—yours for the asking from Rome. Just clip the coupon, mail it today!

6 TW 600 V



Power source to plant—Rome Cable gives you the right answer to every wiring problem. Power station to substation: Rome's interlocked armored cable "installs like cable, protects like conduit." Substation to plant or refinery: Rome's pre-assembled aerial cable goes up fast—even through trees—and is well protected from storms. Inside plant or refinery: Rome Synthinol gives maximum corrosion resistance, assures dependable service.

ROME CABLE

Department 7-9, Rome, N. Y.

☐ Please send me more information on the above.

Name

Title

Company

Street

City Zone State



MEET
THE
MAN

WHO'S
DEDICATED
TO YOUR JOB
YOUR
ROME CABLE
SALESMAN

Only Edwards

YOUR MARKETS	EDWARDS PRODUCTS																	
	Fire Alarm Systems	Clock Systems	Clock & Program Systems	Paging Systems	Inter Communication Systems	Burglar Alarm Systems	Psychopathic Systems	Nurses' Call Systems	In & Out Registers	Annunciators	Chimes	Bells	Switches	Mirrors	Push Buttons	Door Openers	Call Buttons	Other Contact Devices
Schools	●	●	●		●						●	●	●	●			●	●
Industrial Plants	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●	●
Offices	●	●	●	●	●				●	●	●	●	●	●	●		●	●
Stores	●	●	●	●	●	●				●	●	●	●	●	●		●	●
Warehouses	●			●	●	●					●	●	●	●				●
Hospitals	●	●		●	●	●	●	●	●	●	●	●	●	●	●		●	●
Residences	●			●	●	●					●	●	●	●	●	●	●	●

Edwards Company, Incorporated, Norwalk, Connecticut In Canada: Edwards of Canada, Limited, Owen Sound, Ont.

makes a complete line of signaling products for contractor installation ■ readily available through your local electrical distributor ■ backed-up by Edwards' technical representative assistance in 58 areas from coast to coast and Canada ■ preferred by electrical contractors four to one

Edwards!

over any other brand For control, communication, protection, recommend and install Edwards signaling products, manufactured by the company that's teamed up with you for more profitable business in the modernization and construction market.*

*According to a recent Brand Preference Study.

Bull Dog[®] Tape

Best in show — on every point!



**MAKE BULL DOG YOUR PET TAPE...
for every purpose**
• FRICTION • RUBBER • PLASTIC



BOSTON

BOSTON WOVEN HOSE & RUBBER COMPANY
DIV. OF AMERICAN SILTRITE RUBBER CO., INC.
BOSTON 3, MASS.

Also manufacturers of Garden Hose • Matting • Stair Treads • Automotive Hose



◀ *Sticks fast*

◀ *Stays tight*

◀ *Splices neatly*

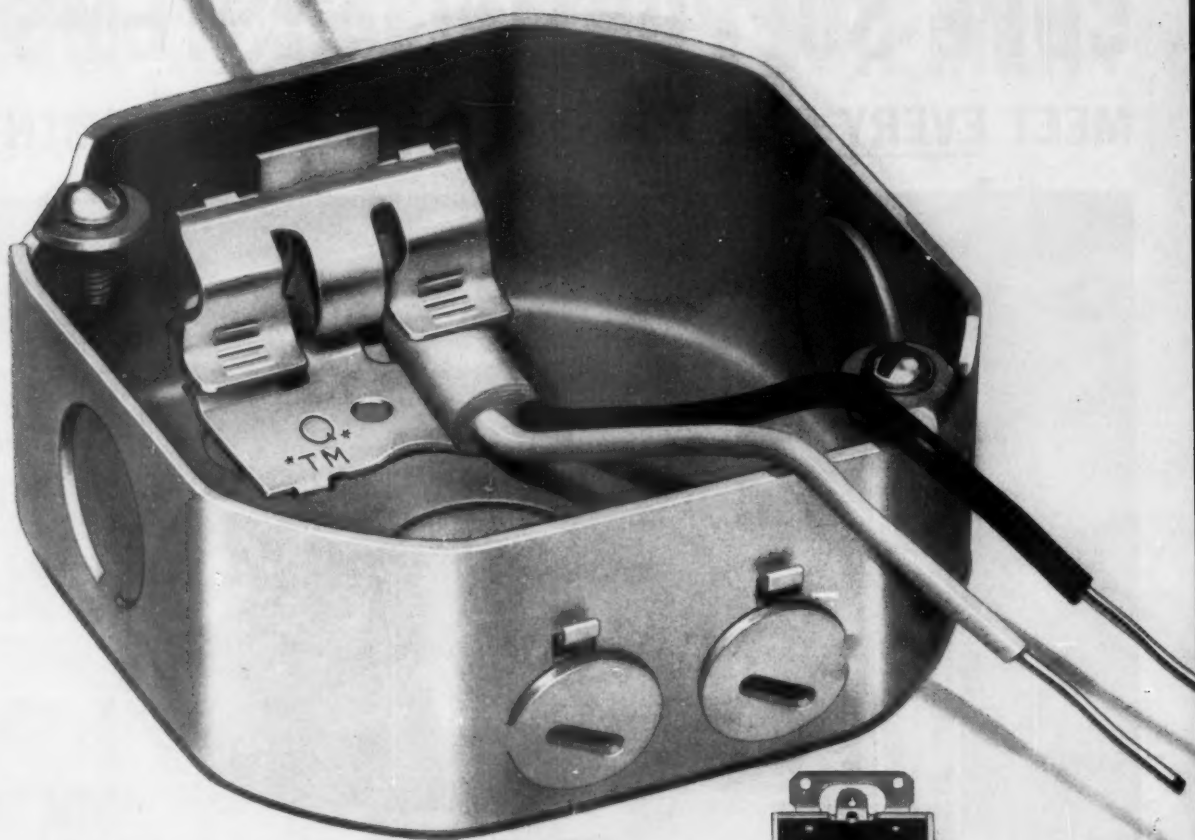
◀ *Non-raveling*

◀ *High dielectric strength*

◀ *Resists aging*

◀ *Resists moisture*

*Sold only
through verified
wholesalers*



RACO screwless "Q" Quick-Clamp saves time on the job

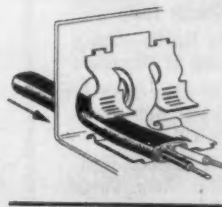
With RACO's new "Q" Quick-Clamp you can install non-metallic sheathed cable in seconds—without clamp screws. Simply push the cable through "Q" Quick-Clamp. Cable is held firmly in place, can't be pulled out until clamp is released. To release the cable, apply a little pressure under the clamp with your screwdriver. With the new "Q" Quick-Clamp there will be no more lost time tightening and loosening cable clamp screws... no more stripped screw heads.

And... you'll save an hour or more on the average job (60 to 100 boxes per house). Your RACO Distributor has the new "Q" Quick-Clamp Switch and Outlet Boxes. (Exceed Underwriter Laboratories' tests; are fully protected by patents.) See them and try them now.

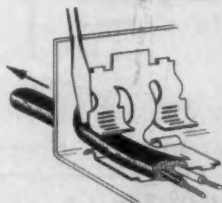
*Trademark



"Q" Quick-Clamp available in RACO switch or outlet boxes



Cable moves freely into clamp and is gripped tightly



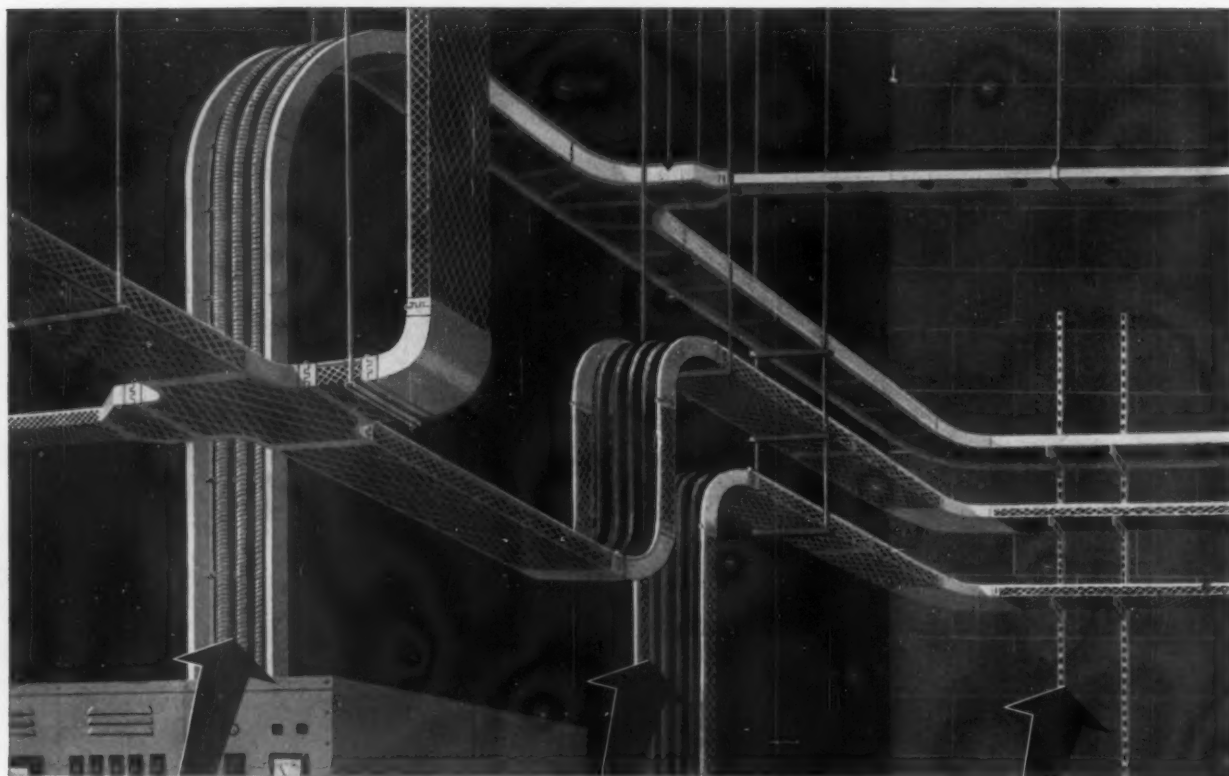
To back-off cable, release clamp pressure with screwdriver



ALL-STEEL EQUIPMENT INC. Aurora, Illinois

COPE SUPPORTING SYSTEMS...

MEET EVERY CABLE DISTRIBUTION REQUIREMENT...



LADDER and CHANNEL for Support of Interlocked Armored Cable and Individual Branch Runs

- All Cope Systems Feature Exclusive Cope Pin-Type Coupler for Faster Assembly Without Special Tools
- Lightweight, Easy to Handle—Choice of Hot Dip Galvanized or Aluminum
- Fittings Supplied Complete Ready to Go—No Extras to Bother With on the Job
- Provides Maximum Installation Flexibility—For Changes in Width, Direction, Elevation and Cable Dropouts
- Provides for Easy System Expansion in Future

WIREWAY for Primary Power and Secondary Distribution Circuits

- Simplifies Installation on Any Job—Large or Small
- Supports More Cable in Less Space than Conduit—Over 1,000 Interchangeable System Components—Straight Sections and Fittings—to Fit Any Type Layout
- Available in Durable Expanded Metal—Lightweight Aluminum or Hot Dip Galvanized Steel Construction
- Prompt Delivery Through Nearby Wholesalers

SYSTEM SUPPORTS and ACCESSORIES

- Interlocking Steel Supports for Easy, Low Cost Installation of Wireway, Ladder and Channel Systems
- Complete Line of Sheaves and Cable Rollers Speeds Installation of Cable



PLUS NEW CONTROLWAY—LOWEST COST SUPPORT FOR LOW VOLTAGE CONTROL AND SIGNAL CIRCUITS

**COPE SUPPORTING SYSTEMS AND EQUIPMENT ARE SOLD ONLY THROUGH
AUTHORIZED COPE ELECTRICAL WHOLESALERS**

..AND INSTALLATION EQUIPMENT

.. SIMPLIFY EVERY INSTALLATION JOB!

POLE TO POLE

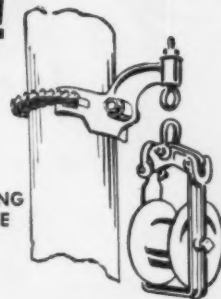
AERIAL
PLATFORM



CROSS ARM
SHEAVE

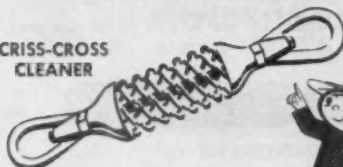


STRINGING
SHEAVE



IN CONDUIT AND DUCT

CRISS-CROSS
CLEANER



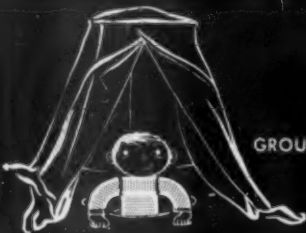
ROD GRAPPLE

FLEXIBLE
MANDREL

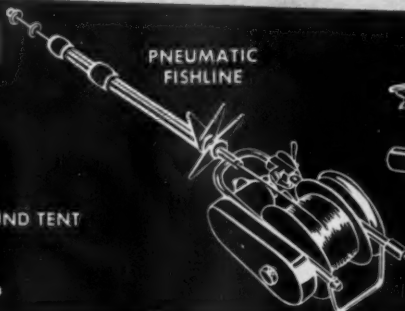


DOG TOOTH
CUTTER

UNDERGROUND



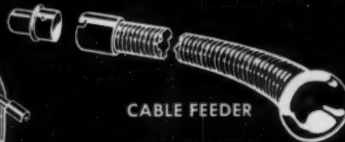
GROUND TENT



PNEUMATIC
FISHLINE



QUICK COUPLING
CONDUIT ROD



CABLE FEEDER

THERE'S A COPE TOOL DESIGNED FOR YOUR PARTICULAR CABLE INSTALLATION JOB

- ▶ Cope Pneumatic Fishline—Compact, Air-Operated Device to Fish Underground Duct in Minutes!
- ▶ Cope Conduit Rods, Grapples, Pullers and Feeders—Handy Tools to Meet a Variety of Installation Problems in Underground Duct.
- ▶ Cope Cross Arm Sheaves, Stringing Sheaves, Angle Cross Sheaves—in the Right Size for the Toughest Aerial Installation.
- ▶ Also Custom Designed Tools for Your Specialized Requirements.

SAVE TIME AND COSTS—HAVE THE RIGHT COPE TOOL ON HAND! WRITE FOR CATALOG NO. 65.

T024

COPE

Serving the electrical industry
since 1885

Division of ROME CABLE CORPORATION • COLLEGEVILLE, PENNSYLVANIA



CRESCENT

Insulated Wires and Cables



Pictured and described here are just a few of the many wires and cables that are made by CRESCENT



ABC ARMORED CABLE

Has prefabricated breaking lines which make installing easier, quicker and safer. A flattened bonding wire in contact with the underside of each convolution of the armor assures a permanent low resistance of armor.



SYNTHOL BUILDING WIRE—TYPE TW

For both wet and dry locations. Insulated with a special, tough thermoplastic compound. High dielectric and mechanical strength. Smallest outside diameter for same conductor size permits more or larger conductors in same space.



ENDURITE BUILDING WIRE — TYPE RH-RW

A dual purpose wire, for either dry or wet locations. Type RH has a greater carrying capacity because of higher permissible operating temperature, which allows use of smaller size cable at less cost.



IMPERVEX TRENCHWIRE — TYPE USE-RR

Single conductors for direct earth burial. Has a heavy Neoprene jacket over the rubber insulation. Provides low cost, permanent underground cable installation.



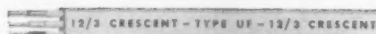
STEEL TAPED PARKWAY CABLE

Designed for direct earth installation without additional protection. All standard types regularly supplied and special type cables made to customers' specifications.



IMPERIAL PORTABLE POWER CABLE

Illustration shows Type SH-D 5000 Volt Trailing Cable for supplying power to electric shovels, dredges, etc. Covered with extremely tough Neoprene jacket.



TYPE UF AND TYPE NMC

Used for direct earth burial as an underground feeder, also used for branch circuit wiring in damp or corrosive locations.



BUILDING WIRE — TYPE RHW

Braid or Neoprene covered. Highest quality insulation, for use in both WET and DRY locations 75° C.



CRESFLEX

Most suitable, lowest cost for rural, residential and farm buildings. Clean, gray paint finish.



SERVICE CABLES — TYPE SE

Both Style A (armored) and Style U (unarmored) are approved by Underwriters' Laboratories as service entrance cable and may be run down the side of a building without additional protection. It is tamper-proof, flexible and lightweight, moisture-resistant and flame-retarding.



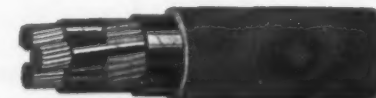
NEOPRENE CRESCORD

Heavy duty, oil-proof portable cord, Underwriters' Laboratories Type 80.



INTERLOCKED ARMOR POWER CABLE

Provides a flexible, metal-enclosed method of wiring for power.



VARNISHED CAMBRIC LEAD ENCASED CABLE

Varnished cambric insulation has high dielectric strength and long life. Not affected by oils and greases. This cable is supplied with lead sheath for wet locations or weatherproof braid for dry locations.

CRESCENT INSULATED WIRE & CABLE CO.

TRENTON, 5, N. J.



B-M

INDENTER FITTINGS and TOOLS

Here is the combination that is unbeatable when it comes to easier E.M.T. installation at less cost. New lightweight plier size indenters make setting up thin wall conduit a breeze. B-M fittings are neater too! No unsightly nuts or projecting set screws.

A few more of the plus features of B-M fittings are Concrete tight—Vibration resistant—Extra heavy bright zinc plate, salt spray and acid drip tested for corrosion resistance—

Extra heavy positive bonding lock-nuts—Smooth rounded edges or bushed throat type connectors that prevent insulation damage—All steel construction with extra heavy gauge wall thickness.



BM-31
1/2" Offset Connector



Red Throat
BM-21B
1/2" Connector



Red Throat
BM-22B
3/4" Connector



Red Throat
BM-23B
1" Connector



BM-41
1/2" Coupling



BM-42
3/4" Coupling



BM-43
1" Coupling



BM-21
1/2" Connector



BM-22
3/4" Connector



BM-23
1" Connector



BM-No. 600
Changeable
Jaw Indenter



BM-No. 1000
Handvise for 1/2",
3/4" and 1" E. M. T.



BM-No. 100
Cutter for 1/2",
3/4" and 1" E. M. T.

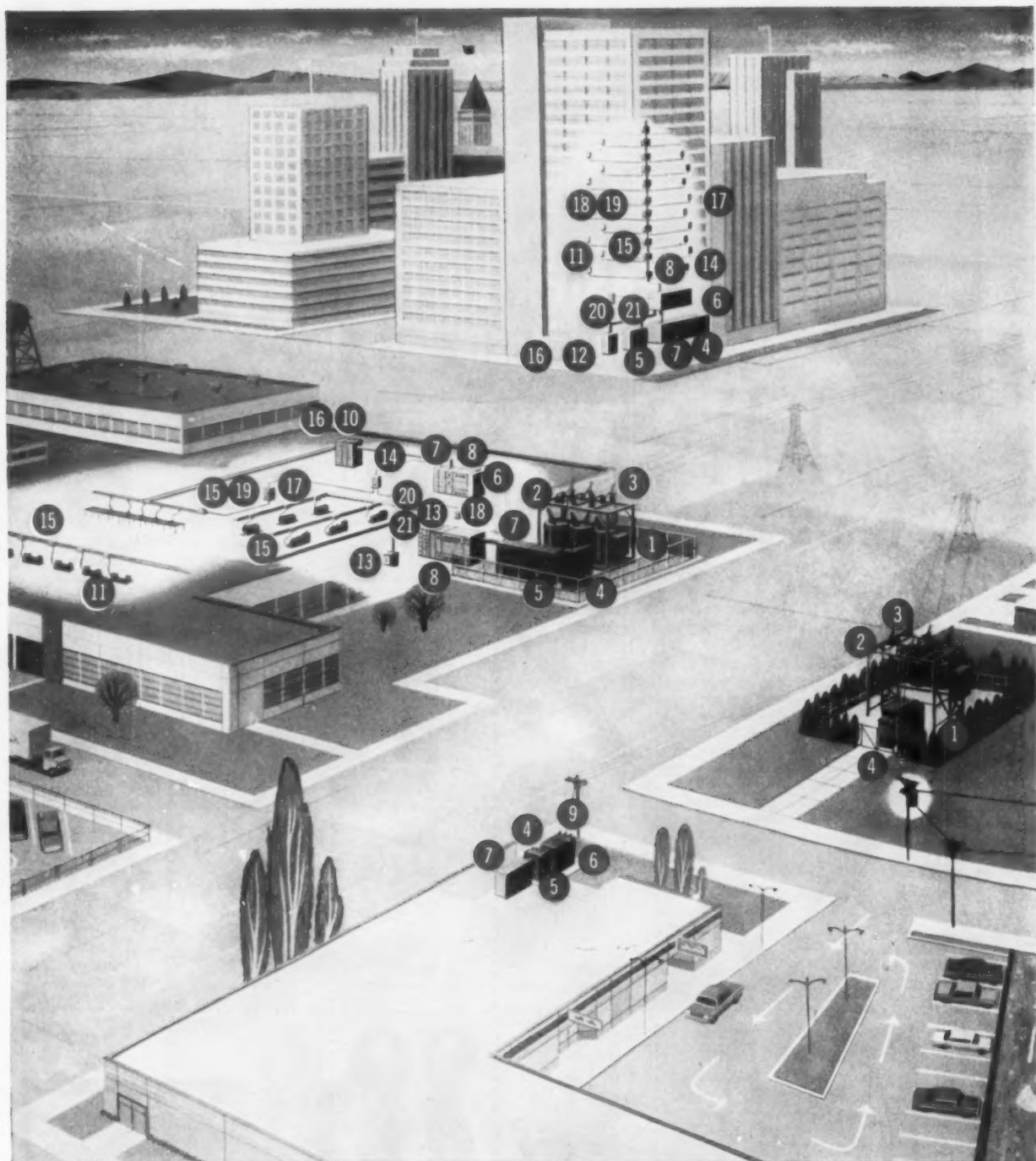


BM-No. 607
1/2" Indenter
BM-No. 608
3/4" Indenter



All B-M indenter type fittings far exceed the requirements of U. L. file card E 10863 and Federal Specifications W-F-406.

BRIEGEL **METHOD**
TOOL
CO.
GALVA • ILLINOIS

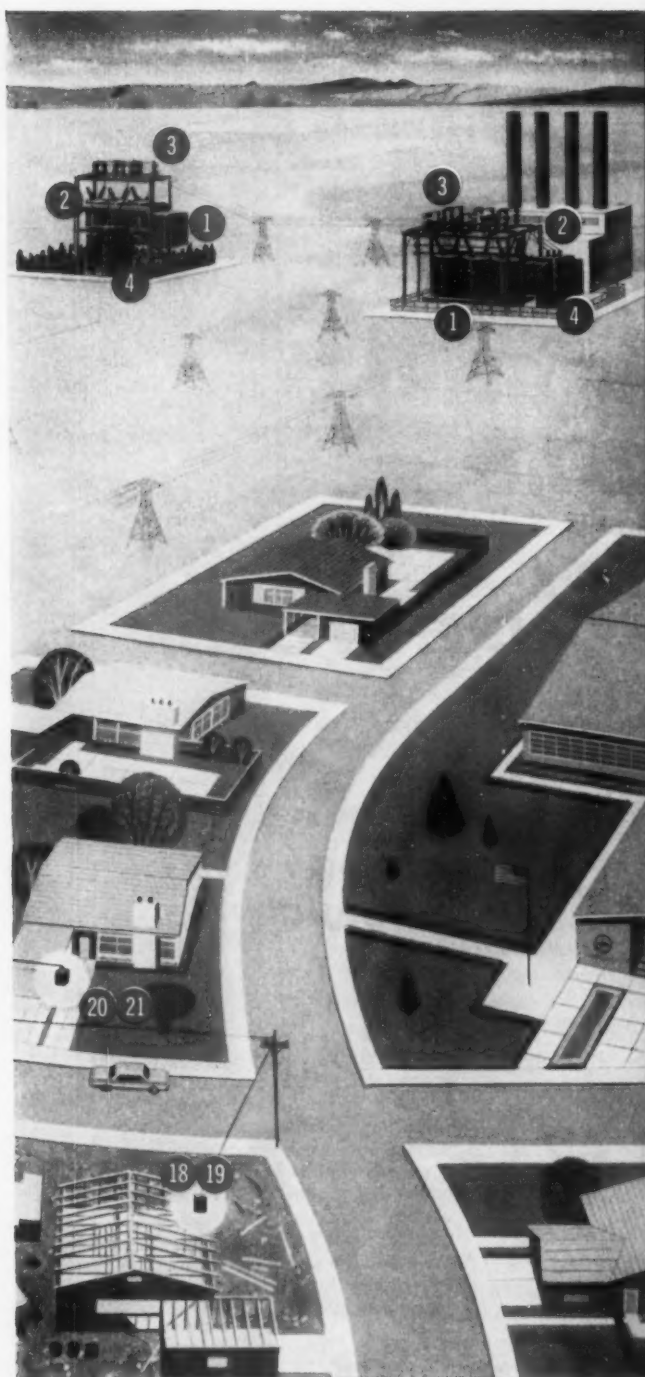


A complete line of quality electrical



FEDERAL PACIFIC ELECTRIC COMPANY

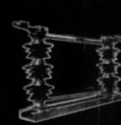
General Offices: 50 Paris Street, Newark 1, New Jersey



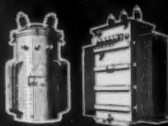
1 Oil Circuit Breakers



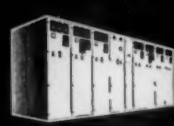
2 High Voltage Entrance Bushings



3 Power Switching Equipment



4 Distribution and Power Transformers



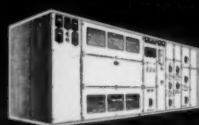
5 Assembled Switchgear



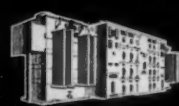
6 Protective Relays



7 Indicating Instruments



8 Power Centers



9 Unit Substations



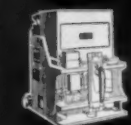
10 Control Centers



11 Motor Control



12 Switchboards



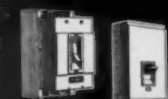
13 Low Voltage Power Circuit Breakers



14 Panelboards



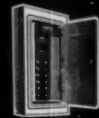
15 Busways and Wireways



16 Molded Case Circuit Breakers



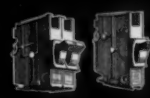
17 Safety Switches



18 Fusible Service Equipment



19 Fuses



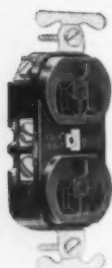
20 Stab-lok Circuit Breakers



21 Stab-lok Load Centers

distribution and control equipment

FOR HOMES, COMMERCIAL BUILDINGS, INDUSTRIAL PLANTS and UTILITY SYSTEMS



2515 *



3401 *



3213-1 *

CIRCLE F WIRING DEVICES



136 *



2035 *



585 *



3650 *



2517 2516 *



864-SO *



2632 *

*whatever your
wiring device
needs . . .*

CIRCLE F devices give you everything you want—and you save money, too! High quality, low cost Circle F wiring devices provide fast, easy installation, trouble-free service and eliminate call-backs. Precision engineering and quality-controlled production plus rugged construction guarantee customer satisfaction. Circle F devices are available at Electrical Wholesalers everywhere for quick pick-up or delivery.



*Only one of a complete line. For additional information, write for catalog.



CIRCLE F MFG. CO.

TRENTON 4, NEW JERSEY • For your wire requirements: Eastern Insulated Wire Corp., Box 591, Trenton, N. J.

SPECIFY CLIFTON CONDUIT

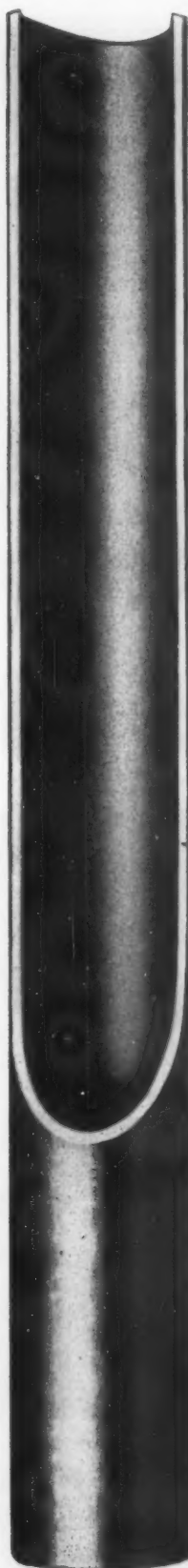
The conduit with
built-in quality

1 EMT (Electrical Metallic Tubing) the only hot-dipped galvanized tubing—inside and out for complete protection • flat, clean, continuous weld for smooth interior surface and ease of pulling during installation.

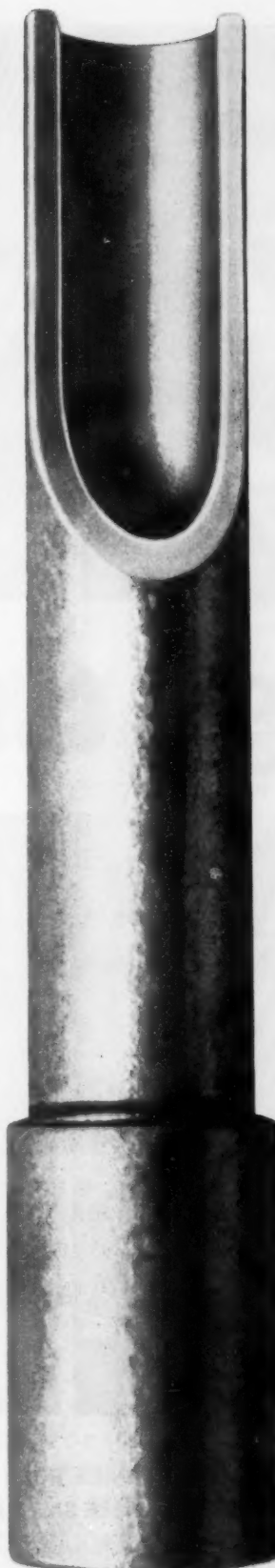
2 RIGID CONDUIT made of the finest steel available • Clifton's exclusive process for hot-dipped galvanizing guarantees a uniform zinc protective coating ... inside and out • the finest rigid conduit made. Clifton Rigid Conduit is approved by Underwriter's Laboratories, Inc. and conforms with Federal Specification WW-C581C and ASA Specification C-80.1-1953. Clifton EMT is approved by Underwriter's Laboratories, Inc. and conforms with Federal Specification WW-T-806B and ASA Specification C-80.3-1953. RIGID CONDUIT ELBOWS, COUPLINGS, AND NIPPLES in a full range of sizes • are manufactured of the same fine high quality steel as RIGID CONDUIT • hot dipped galvanized inside and out.

3 FLEXIBLE STEEL CONDUIT really flexible and crush-resistant for easier and faster installations • manufactured under Clifton's rigid controls from purchase of high quality steel tape to finished product • smooth inside surface assures you trouble free pulling during installation. Clifton Flexible Steel Conduit is approved by Underwriter's Laboratories, Inc. and conforms with Federal Specification WWC-556. Other quality products by Clifton: Bushed Armored Cable; Unarmored Service Entrance Cable; (CLIFTX) Non-Metallic Sheathed Cable; CLIFALL-UF; Building Wire —TW, RHW, RR.

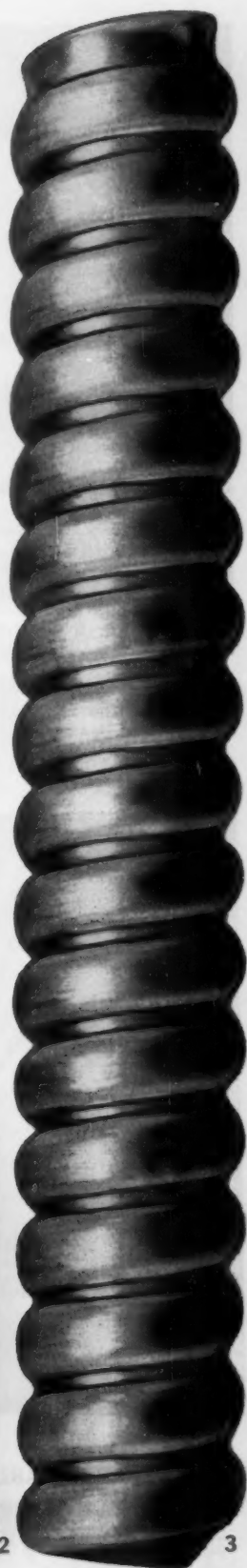
CLIFTON CONDUIT CORPORATION
A Division of General Cable Corporation
3300 Eastbourne Ave., Baltimore 24, Md.



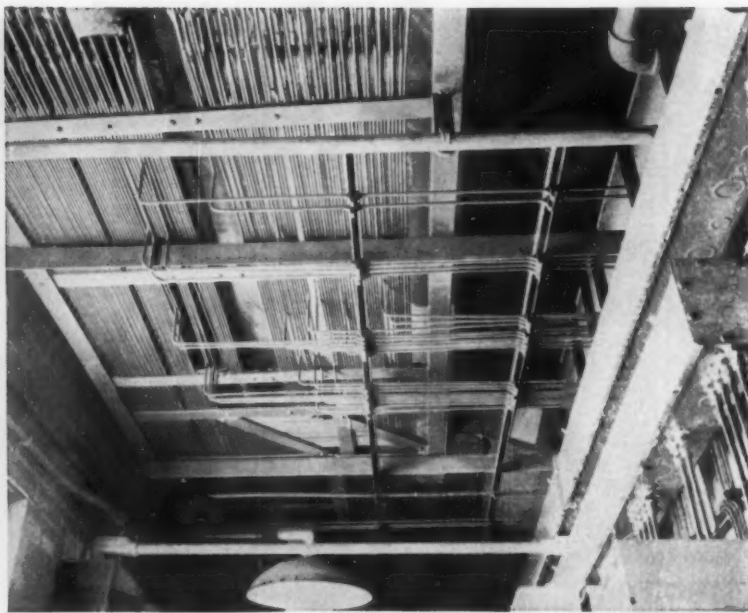
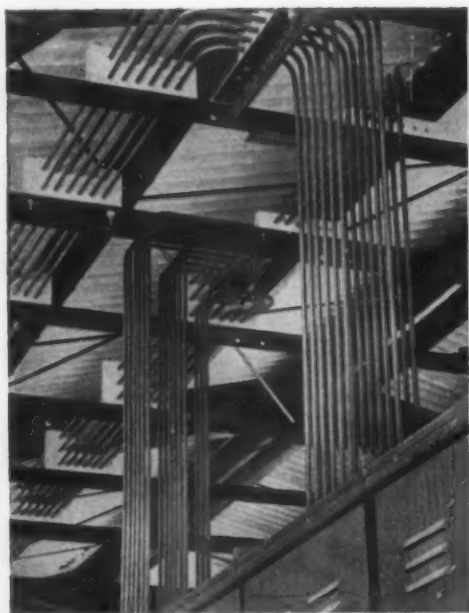
1



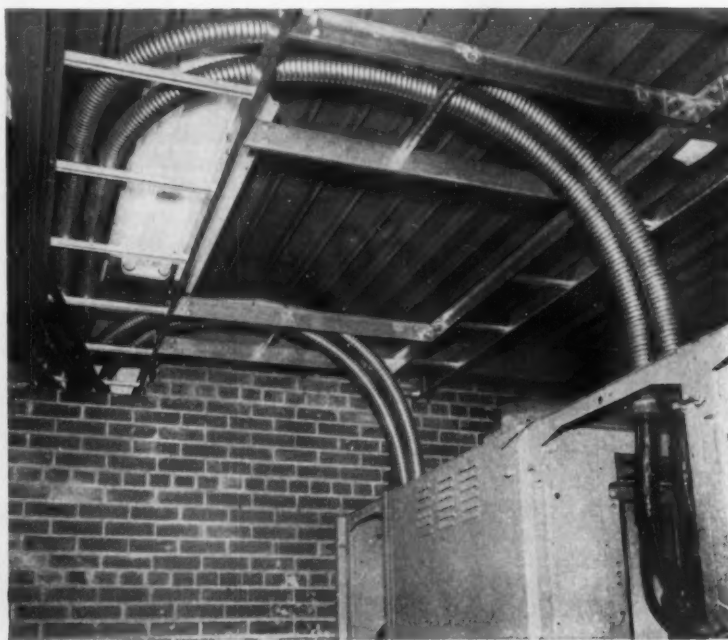
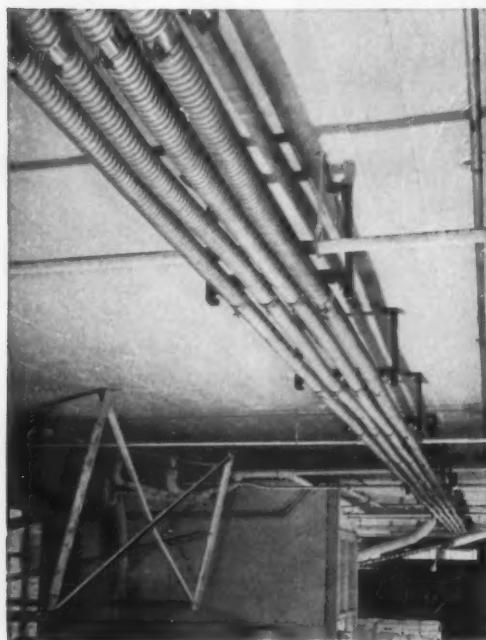
2



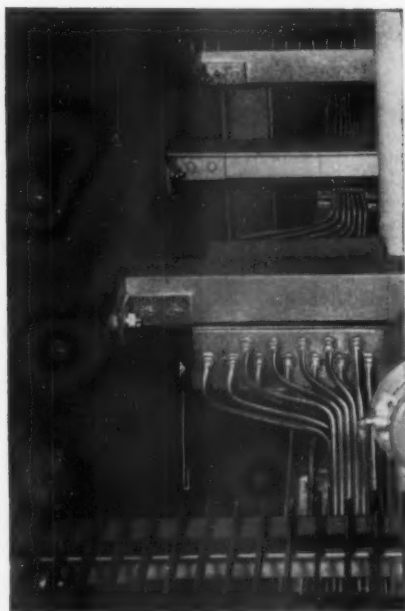
3



the right combination for



**ONLY GENERAL CABLE MANUFACTURES BOTH TYPE MI AND INTERLOCKING ARMORED CABLES.
CONTACT YOUR NEAREST GENERAL CABLE SALES OFFICE FOR FULL INFORMATION AND SPECIFICATIONS.**



type mi cable

for power distribution,
control and
lighting circuits

TYPE MI CABLE has solid copper conductors and sheath separated by highly compressed inorganic insulation! Just about indestructible, yet it trains easily over and around obstructions. Naturally it needs no protection: just train it and terminate it. MI is compatible with all other wiring systems. It is completely resistant to moisture, age, nearly all chemicals, temperatures up to 185°F with standard terminations, 482°F with special terminations; and it is approved for use in hazardous areas. It will last forever.

industrial power



inter- locking armored cable

for feeder circuits

GENERAL CABLE'S Interlocking Armored Cable combines flexibility with the mechanical protection normally afforded by metallic conduit, yet has the same current rating as cable in free air. It can be trained to fit the contours of buildings and surrounding equipment and provides a neat, compact installation. It is available in bronze, aluminum and steel and may be applied over most cable insulations in the voltage ranges recommended by industry standards. Protective coverings are available to combat environmental conditions which might cause pitting or corrosion of the interlocking armor.



GENERAL CABLE CORPORATION
65 Offices and Distributing Centers Coast-to-Coast

730 Third Ave.
New York 17, N. Y.

for quality
and service
specify...

GENERAL CABLE





Over 600 Independent Electrical Wholesalers Offering Prompt Service

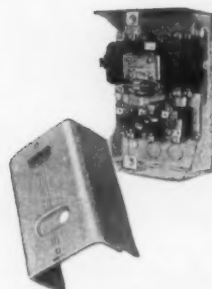
The man who represents a manufacturer's product to potential customers has become more and more important. This is why Cutler-Hammer carefully chooses the independent electrical wholesalers that will bear the name "Authorized Cutler-Hammer Distributor".

There are now over 600 Authorized Cutler-Hammer Distributors throughout the United States selected and trained to best serve your needs for electrical control — including motor starters and regulators, safety switches, fusible service control, Unit Breaker load centers, pushbuttons, pressure switches and other accessories. Each one carries a complete line of controls to insure prompt delivery and service.

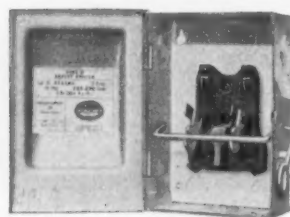
Cutler-Hammer chooses to be represented by independent electrical wholesalers in order to give you, the customer, the best possible service. Service has become very important in the electrical industry especially during the past few years. The reason for this is that you, the customer, have a right to not only a quality product but prompt service as well.

The next time you require electrical control and want prompt service and quality products, see your nearby Authorized Cutler-Hammer Distributor.

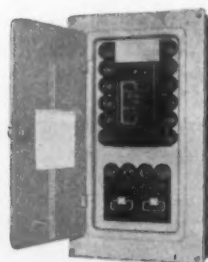
CUTLER-HAMMER Inc.
1204 West St. Paul Ave.
Milwaukee 1, Wisconsin



MOTOR CONTROL



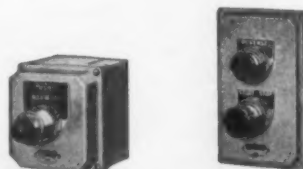
SAFETY SWITCHES



**FUSIBLE SERVICE
CONTROL**



**UNIT BREAKER
LOAD CENTERS**



ACCESSORIES

NATIONWIDE SALES AND SERVICE

ATLANTA, GEORGIA
Cary Chapman & Company
672 Whitehall Street S. W.

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2516 Eighth Court North

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A. J. Hurley
273 Congress Street

CHICAGO, ILLINOIS
D. S. Davis & Company
2919 N. Paulina Street

CLEVELAND, OHIO
Kilkenny Company
1729 Superior Avenue N. E.

DALLAS 2, TEXAS
G. E. Anderson Company
1901 Griffin Street

DETROIT 2, MICHIGAN
Alva A. Togen
6560 Cass Avenue, Suite 310

ELIZABETH, NEW JERSEY
R. L. Brown Associates
663 Pennsylvania Avenue

GREENSBORO, NORTH CAROLINA
Cary Chapman & Company
1009 S. Elm Street

HAMDEN, CONNECTICUT
Mills Talbot & Company
P. O. Box 4212

HIALEAH, FLORIDA
Cary Chapman & Company
301 E. 10th Avenue

HONOLULU 16, HAWAII
Mr. Harold D. Kroh
836 Ocean View Drive

KANSAS CITY 1, MISSOURI
Schooler-Gorman Company
1224 W. 9th Street

LOUISVILLE, KENTUCKY
Thomas W. Bullock Company
121 Breckinridge Lane
Colonial Building

LOS ANGELES, CALIFORNIA
Airelectric Incorporated
120 S. Hewitt Street

LOS ANGELES, CALIFORNIA
Collyer Electric Wire Sales Co.
2800 E. 12th Street

MILWAUKEE 13, WISCONSIN
Goehler and Adams
6033 W. Bluemound Road

MINNEAPOLIS, MINNESOTA
M. J. Pelletier
1015 N. Third Street

NEW ORLEANS, LOUISIANA
Cary Chapman & Company
213 S. Front Street

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H. W. Emery & Company
30 Church Street

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Mr. William M. Selig
99 Waban Hill Road North

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W. A. Leiser & Company
1219 Race Street

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Bruce Emmett Company
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SELECT

Collyer RHW
Collyer Style RR
(RHW Insulation)
Collyer Style RR
(Butyl Insulation)
Collyer VCB with
or without inter-
locking armor
Collyer VCL with or
without protective
neoprene sheath
Collyer Self-Supporting
Aerial Cable (Butyl
Insulation)
Collyer Type AVA
Collyer Type AVL
Collyer Silicone Power
Cable

ANYWHERE...

ANY KIND...When

the Call is for Cable,

CALL FOR Collyer

Collyer SE Style U or A

Collyer Neutral Supported
Service Cable

Collyer Type AVB

Collyer Type TA

Collyer C-141 (Poly-
ethylene, Nylon, PVC)

Collyer RR Control
Cable (Oil Base Insulation)

Collyer SJ or SJO, Light Duty

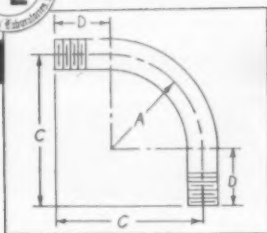
Collyer S or SO, Heavy Duty

Collyer Type W

Collyer Type G

COLLYER INSULATED WIRE COMPANY
265 ROOSEVELT AVENUE
PAWTUCKET • RHODE ISLAND

SIZES OF SPECIAL LARGE RADIUS 90° ELBOW



radius "A" in inches	offset "C" in inches	straight length "D" in inches	pipe sizes "E" in inches
12"	1'9"	9"	3'0"
15"	2'0"	9"	3'6"
18"	2'4"	10"	4'0"
24"	2'11"	11"	4'11"
30"	3'5"	11"	5'9"
36"	3'11"	11"	6'6"
42"	4'6"	12"	7'6"
48"	6'0"	12"	8'4"

Also available 45°, 30° and 60°.
All are U.L. approved.

Elbows

90° and 45°



have smooth,
work-speeding
raceways

Conduit of Columbus elbows are U.L. approved. They are available in sizes 1/2" to 6". Sizes 1/2" to 2" are conveniently cartoned and all are shipped promptly from factory or from one of ten strategically located warehouses.

Nipples



for convenient,
money-saving connections

Conduit hot-dipped galvanized nipples are carefully threaded and chamfered, rigidly inspected and U.L. approved. Available in all sizes for prompt shipment from factory or ten strategically located warehouses. Sizes: 1/2" x close to 2" x 6" are all attractively packaged. Larger sizes 2 1/2" to 6", in various lengths, also available.

Specify

these **Columbus** conduit fittings
... look for the UL Label

EMT Elbows



have
clear channels

Smooth raceways mean quick installation without cable damage . . . reduce contractors' costs.

Conduit E.M.T. Elbows are made in sizes 1", 1-1/4", 1-1/2", and 2". They are U.L. approved. Conveniently packaged at no extra cost. Shipped promptly from factory or from one of ten strategically located warehouses.

Couplings



for right—tight connections

Accurate tapping, careful chamfering and rigid inspection combine to give users completely satisfactory installations. Conduit Couplings are hot-dipped galvanized or black enameled . . . are available in all sizes from 1/2" to 6". Sizes 1/2" to 2" are conveniently packaged at no extra cost. Shipped promptly from factory or from one of ten strategically located warehouses.

Running Thread



for any connection

Conduit running thread is furnished in convenient 3' lengths in three finishes: raw black, electroplated and hot-dipped galvanized. Your orders can be shipped promptly from the factory or from one of ten strategically located warehouses.

Sold only through recognized wholesalers



Columbus

BRAND
CONDUIT FITTINGS

CONDUIT PIPE PRODUCTS COMPANY — COLUMBUS, OHIO





equipment of proved dependability

SPLICING KITS, pre-engineered to save time and money



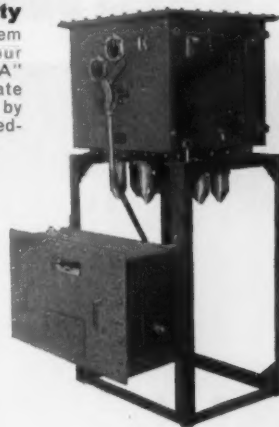
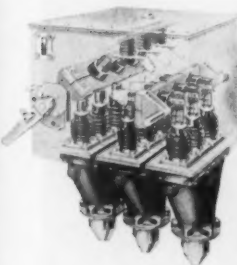
Each item supplied in the correct quantity for a properly designed joint. Time and expense of securing various items from different sources are saved. Accumulation of dead stock is avoided; no waste. All materials kept clean and ready for use. Each splicing kit labeled for easy identification. Cable splicing costs can be determined accurately.

Send for series "J" bulletins.

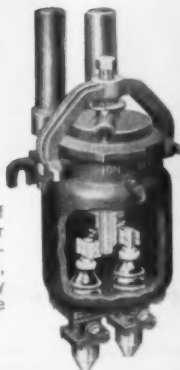
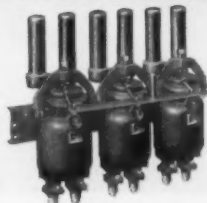
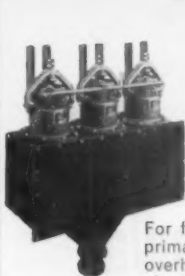
LOAD-BREAK OIL SWITCHES provide cable system flexibility

Reduce overtime work on system maintenance. Sectionalize your distribution system with Type "RA" load-break oil switches. Isolate cable faults and restore service by switching loop or duplicate feeders—manually or automatically.

Send for series "D" bulletins.

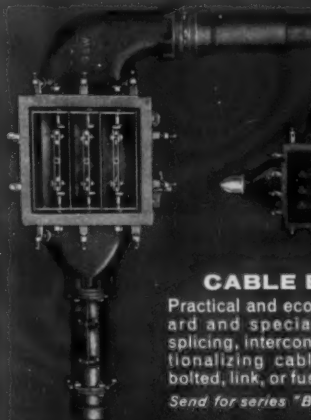


OIL FUSE CUTOUTS



For fusing or load-break switching of primary circuits in subway, vault, or overhead installations. All steel enclosure, oil filled, hermetically sealed, protects men and equipment by safely withstanding high pressures of fuse clearing heavy short circuits.

Send for series "C" bulletin.

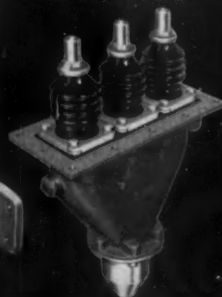


CABLE BOXES

Practical and economical standard and special designs for splicing, interconnecting or sectionalizing cables with solid, bolted, link, or fuse connections.

Send for series "B" bulletin.

POTHEADS for every high voltage cable



Sodertite, capnut, disconnecting. Solder, clamp, or press-style connectors for copper conductors; press-style for aluminum conductors. Wiping sleeve or stuffing box cable entrance seals. Conduit and armor fittings.

For detailed information on the complete G & W line send for series "A" bulletins.



G & W ELECTRIC SPECIALTY CO.

3500 W. 127th Street, Blue Island, Ill. Representatives in principal cities of N. and S. America

Canadian Mfr.: Powerlite Devices, Ltd., Toronto

4 new ideas in power distrib



New Switchboard

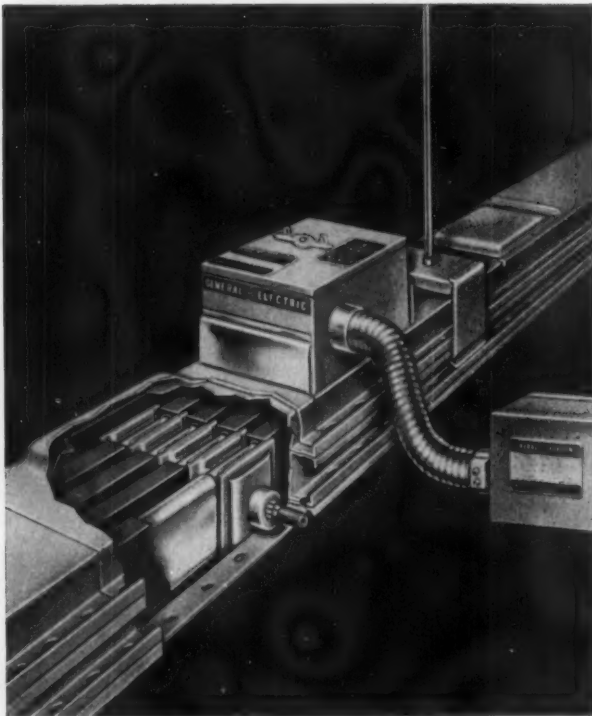
For 600-volt, maximum service, 50-100,000-ampere short circuit rating

Standardization is the keynote in this new Type DR switchboard. Standardization provides greater flexibility, easier installation and more maintenance features than ever before—at lower total cost.

Standardization, for example, enables the DR to incorporate any combination of seven protective devices—fusible or circuit breaker types—with complete interchangeability.

Standardization allows units or whole sections to be added, interchanged or removed—quickly, easily—in the field, as load conditions change, and with minimum time and effort. Pre-drilled, pre-formed modular framework and bus bars virtually eliminate the need for field drilling.

For installation and maintenance ease, standardized, centrally located horizontal main busing leaves the top and bottom of the DR clear for busway or cable entrance. No braces or bars to interfere with wiring. All terminals are easily accessible. Ask for a copy of Bulletin GEA-6627.



New Busway

ampere for ampere, the smallest, lightest, most efficient and rugged ever designed

New Type DE busway is a totally enclosed plug-in busway with 50,000-ampere short circuit capacity as standard. It is rated 225-1000 amperes, 600 volts maximum, 3 pole or 4 wire, 3 phase. New Type DE busway incorporates all 22 features that engineers, contractors and users say are important in busway design.

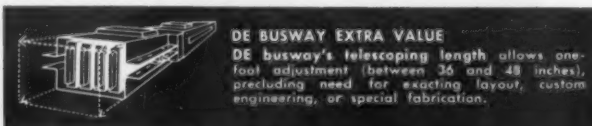
DE, for example, installs with unmatched ease. It is up to 50% lighter and 30% smaller than other busways of comparable rating; approved for hanging on 10-foot centers in any position. Sections are electrically joined—quickly, simply—by means of a unique one-bolt, vise-like mechanism that maintains positive electrical contact between conductors with a ton of force. And DE's miniaturized fittings virtually eliminate the need for custom engineering. Result: 30% average saving in installation cost and 10% over-all.

For flexibility, twelve plug outlets come in each 10-foot length. For extra safety, each outlet is virtually dead-front and traveling arcs are essentially eliminated—thanks to Butyl insulation which is extruded over the full length of each bus bar, overhanging bus plug openings. Ask for a copy of Bulletin GEA-6173.



DR SWITCHBOARD EXTRA VALUE

New stud assembly. Eliminates wire bending—allows "straight-in" wiring—opens up more working space to speed installation. Stud assemblies are mounted on a strong, light-weight, non-magnetic aluminum barrier which minimizes heating.



DE BUSWAY EXTRA VALUE

DE busway's telescoping length allows one-foot adjustment (between 36 and 48 inches), precluding need for exacting layout, custom engineering, or special fabrication.

See your G-E representative or distributor for complete information. You may also obtain complete information on this equipment by writing to General Electric Company, Distribution Assemblies Department, Plainville, Conn.

ution offer more for the money



New Control Center

conserves space, costs less to install, saves money in operation

New compact Type DA7093 Motor Control Center provides an economical, centralized control of A-C motors, up to 200 hp at 600 volts (100 hp at 240 volts).

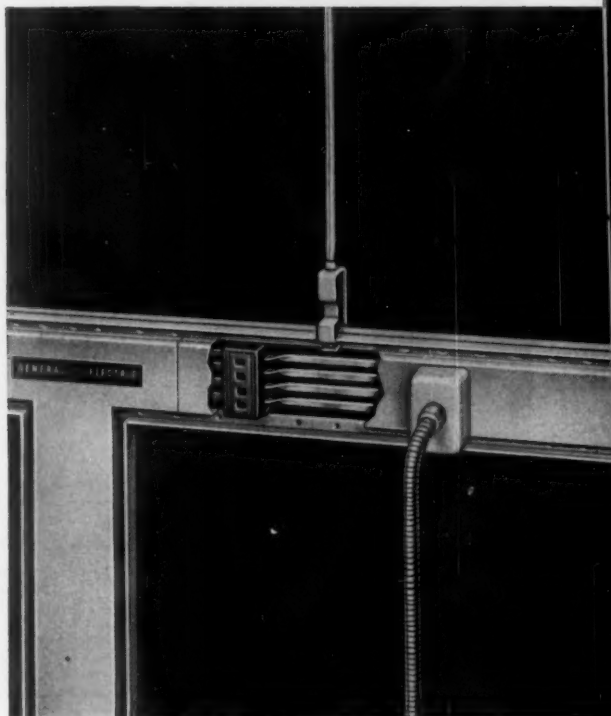
Compared with individual motor control, initial equipment investment with Type DA7093 is usually substantially lower. At the same time, the '93 affords convenient, economical plant operation and low maintenance. And when load requirements change, the '93 is easily expanded to meet them with standardized plug-in control units in NEMA sizes 1 through 5. Other components, such as meters, instruments, relays and panelboards can be built-in to meet specific needs.

Location of main buses at center of section allows wide, unobstructed pull-box space at top and bottom for easy wiring. Bus bars are silver-plated for positive electrical contact and edgewise mounted for optimum short circuit strength. Standard main bus ratings are 600 or 1200 amperes. Bus bars are braced for fault levels of 25,000 or 50,000 amperes. Ask for Bulletin GEA-6367A.



MOTOR CONTROL CENTER EXTRA VALUE

Split Type B terminal blocks (circle) provided on each control unit permit quick, convenient removal of unit without disturbing load and control wiring.



New Busway

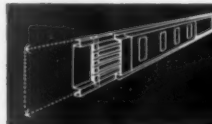
100-ampere plug-in design hailed as the "Wiring Method of Tomorrow"

Now, a plug-in busway that costs no more installed—and usually substantially less—than wire and conduit!

Or as a leading electrical contractor in Wilmington, Delaware, puts it: "With Type DH, I can save 25% over the cost of conduit and wire when there are four or more tap-offs in the system."

Type DH—rated 100 amperes, 3 pole or 4 wire, 3 phase, 600 volts maximum—serves as either a feeder or plug-in system and may be used wherever exposed wire and conduit might be applied. Light, sturdy and small in size (in cross-section not much larger than a pack of king-sized cigarettes), DH may be hung edgewise on 10-foot centers. Eighteen dead-front outlets are provided in each 10-foot length. For added flexibility, each outlet accepts a variety of fusible, no-fuse and circuit breaker plugs.

G-E distributors, nationwide, stock Type DH, including its wide variety of fittings and accessories. So DH matches wire and conduit in availability as well as cost. Ask for Bulletin GEA-6172.



DH BUSWAY EXTRA VALUE

Telescoping length adjusts between 42 and 54 inches. This, plus flexible fittings, eliminates need for exact measurements. Rigid fittings—elbows, crosses and tees—adapt busway to virtually any building contour.

GENERAL  **ELECTRIC**

"LATROBE" PRODUCTS

TRU-LEVEL Adjustable FLOOR BOX



Listed under
Re-examination Service
of Underwriters
Laboratories, Inc.

Fullman's No. 190 Tru-Level adjustable Floor Box is the latest in design—developed for concrete or tile floor, also wooden floors with concrete base—and is watertight. It is built upon a sheet steel, galvanized, 4" octagon box 2½" deep with two ¾" and two ½" KO's in sides—with three ½" and two ¾" KO's in bottom.

A threaded adjusting ring permitting ½ inch height adjustment, in addition to three screw legs, 2½" long, make for quick and easy tru-leveling.

The box-body cover has a 3¼" opening, large enough for the hand to fit into the 4" octagon box. This enables the inside attachment of conduit, without the necessity of removing the box-body cover.

A plastic collar seals out moisture while protecting the adjusting ring threads. A set screw permits "locking-in" of the top adjusting assembly.



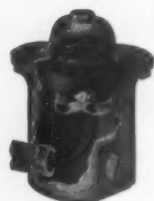
JUNCTION BOXES

We carry a large stock of standard sizes. Special sizes can be had in ten days.



NOZZLES

Nozzles for all types of "Latrobe" watertight floor outlets—Bell Nozzles, Telephone Nozzles, Double Receptacle Nozzles.



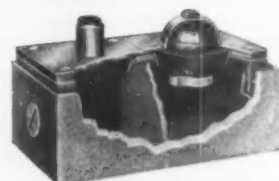
LATROBE Non-Adjustable FLOOR BOXES

Unique in design, neat in appearance, fewest number of parts, low installation cost and greater wire space inside the box body.



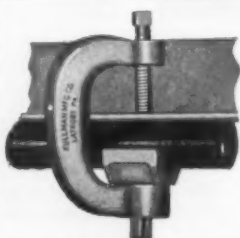
LATROBE Adjustable FLOOR BOXES

All Adjustable Watertight boxes are equipped with a positive electrical bonding wire between the exposed flush parts which make them completely fire-proof.



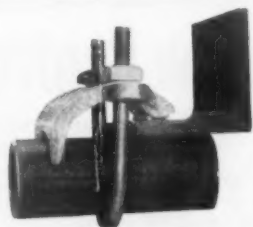
LATROBE Adjustable GANG BOXES

"Latrobe" Gang Floor Boxes with 3½ inch square interchangeable brass cover plates are furnished in single gang, two, three and four gang type.



PIPE or CONDUIT CLAMPS and HANGERS

For hanging ½" to 1½" pipe to steel beams ¾" thick.



Two models—one Right Angle other Parallel—Each in 11 sizes to handle ½" thru 4".



½" x 1" and 5/8" x 1¾" Packed in cartons, kegs and barrels.

STAPLES and CLIPS



For metallic and non-metallic covered cable.



INSULATOR SUPPORTS

Fasten porcelain or glass insulators to steel framework without punching holes—4 sizes—1"-1½"-2"-2½".

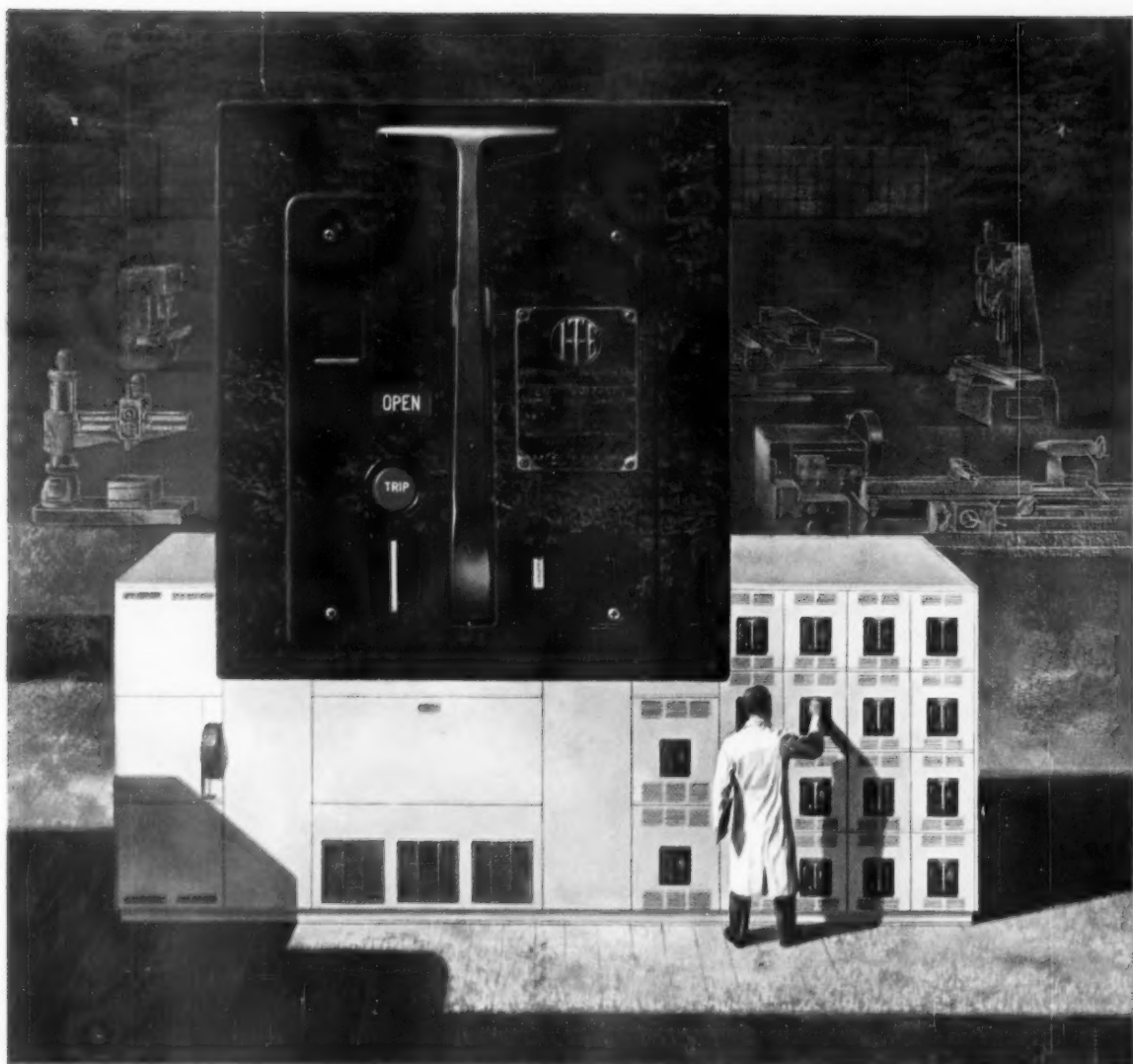
KEYSTONE FISH WIRE

Ten sizes—for lightest work to heaviest power wiring. 100, 150 and 200 foot coils.



Fullman Manufacturing Co.

1209-1215 JEFFERSON STREET, LATROBE, PA.



Typical I-T-E indoor secondary unit substation painted by artist Ned Seidler. Enlarged control panel is from an I-T-E K-LINE circuit breaker. Introduced just last year, the K-LINE broke the design barrier for new safety and economy.

IT MAKES YOUR JOB EASIER ... DOES ITS OWN JOB BETTER

You don't have any problem lining up holes or looking for necessary hardware when you install an I-T-E secondary unit substation. Because it has already been completely assembled and tested before shipment to you.

This makes sense . . . for the user because it insures dependable performance . . . and for you because it saves time, trouble and money. Units are delivered in large assemblies. Little work is required at the site. And all

assemblies are shipped from the same point, timed to mesh with your own construction schedule.

I-T-E can do this because it builds complete unit substations in a single plant . . . including transformer and switchgear. You are assured of closer coordination of designs . . . supervision of construction . . . and proof of performance . . . by engineers working hand in hand. Only I-T-E builds substations this better way.

Turn the page and see how other I-T-E products can help you too



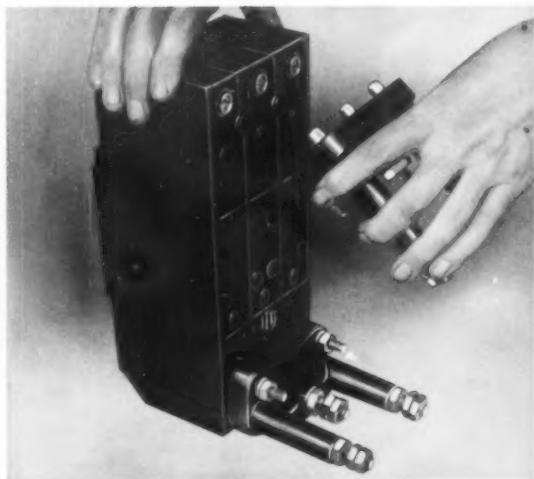
I-T-E CIRCUIT BREAKER COMPANY

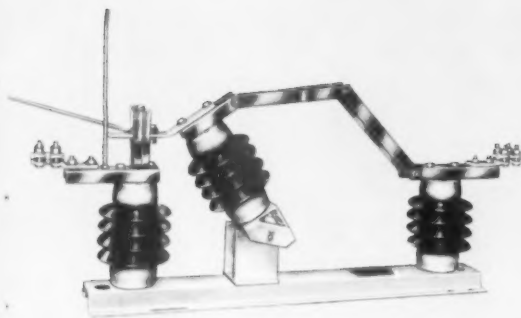


WANT EASY INSTALLATION?

*LOOK INTO THE
BROAD LINE OF I-T-E
ELECTRICAL EQUIPMENT*

Plug-in mounting molded case circuit breakers. A real boon in switchboard applications. Breakers simply plug in. Alignment is automatic. All terminals shielded to protect operator. Completely safe . . . no live parts exposed. Plug-in mounting is available on all I-T-E molded case breakers from 15 to 800 amp capacity. Premium pole spacing means greater safety.





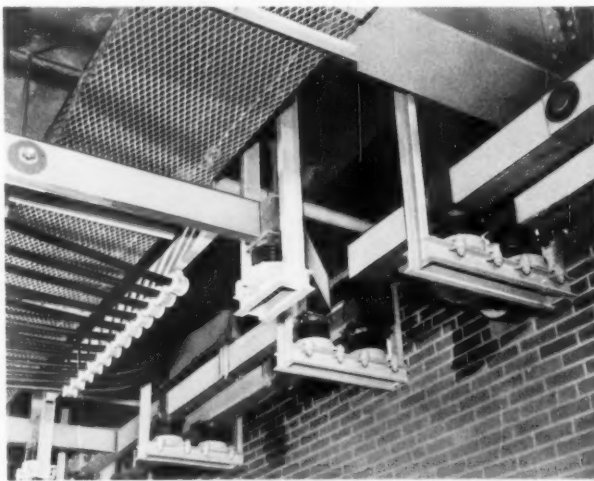
Simple design speeds mounting. I-T-E tilting insulator switches are designed for direct mounting on either substation structures or pole top crossarms. Simple adjustment makes it easy to compensate for crossarm warpage. Corrosion-resistant and vibration-proof hinges, plus silver-to-copper contacts, insure against trouble after switch is placed in service. Available in ratings from 7.5 through 34.5 kv.



Save space. I-T-E CORDON® circuit breakers provide up to 100,000 amp interrupting capacity with molded case economy. Service proven in countless installations. Lightweight and easy to handle. Save 50% switchboard space. Cost approximately one-third less than alternative devices. Ideal for protection of circuits supplied by high-current capacity sources. Broad range of sizes for wide variety of applications.

Enclosed LV power circuit breakers. I-T-E URELITE[®] with new advanced design K-LINE circuit breaker combines easy installation with today's most outstanding performance. Entire front cover lifts off. Restriction-free cable box is wider, deeper and higher . . . accommodates one size larger cables than standard. Can be brought in from top or bottom. URELITE is available in continuous current ratings 15 to 4000 amp.

D-c power package. I-T-E low voltage bus for electrolytic processing is delivered to you complete . . . including connectors, fittings and supports. Required number, size and configuration of conductors are carefully calculated by I-T-E engineers. Parts are formed, punched and marked for fast, accurate assembly. Type CR switches need little space, are easily paralleled for any desired capacity.





Just bolt together the building blocks. I-T-E power switching centers give dependable, space-saving switching and fused protection for main circuits at low investment. Absence of delicate parts simplifies installation. Equipment is delivered in sturdy, preassembled units easy to bolt together. Switches feature ability to close into fault without risk to operator.



Easiest-to-install substation yet. I-T-E TRANFO-UNIT® is a complete self-contained unit substation in a single package . . . with incoming line section, transformer and secondary protective devices all included. Normally delivered as a single unit. Practically no assembly work required. Simply position and connect. Needs no fence.

I-T-E Circuit Breaker Company
1900 Hamilton St., Philadelphia 30, Pa.

C-69

- | | |
|--|---|
| <input type="checkbox"/> Secondary unit substations | <input type="checkbox"/> LV bus and switches |
| <input type="checkbox"/> Tilting insulator switches | <input type="checkbox"/> TRANFO-UNITS |
| <input type="checkbox"/> Molded case circuit breakers | <input type="checkbox"/> Power switching centers |
| <input type="checkbox"/> CORDON circuit breakers | <input type="checkbox"/> K-LINE LV switchgear (600 volt) |
| <input type="checkbox"/> URELITE circuit breakers | <input type="checkbox"/> Metal-clad switchgear (4.16 and 13.8 kv) |
| <input type="checkbox"/> TELEMANT® (motor-operated molded case circuit breakers) | |
| <input type="checkbox"/> Other _____ | |

Name _____ Title _____

Company _____

Street _____

City _____ Zone _____ State _____

*An I-T-E trademark



MAKE IT A HABIT!

Think of I-T-E whenever you buy electrical equipment. Detailed literature available on every product. Send coupon now.



I-T-E CIRCUIT BREAKER COMPANY

A TRAINLOAD OF LIGHTING IDEAS FROM GUTH

THE COMPLETE LINE OF FLUORESCENTS AND INCANDESCENTS

Over a half century in lighting—that's a lot of experience. It's all yours! Here are some of our star performers to give you new ideas for schools, offices or stores. Specify Guth Lighting for better light and sight and greater economy.



SLIMLUX

4 1/4" thin luminaire to flatter today's low ceilings. Luminous or solid sides. GrateLite Louver Diffuser, metal cross-baffles, or low brightness lens.



SEELUX®

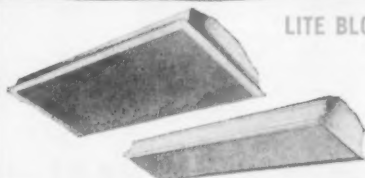
Distinctive, three-ring open bottom for silver bowl lamps. Efficient, totally-indirect lighting for schools, stores, offices. Variety of styles.

SQUARE RECESSED UNITS
Available in a wide variety of Holophane and Corning lenses with ALZAK and prismatic glass reflectors.



LOOVOLITES

Low-cost recess units with glass louver-lens, open bottoms, or metal louvers. Heat-proof, breakproof ALZAK aluminum reflectors. Many other round recess units.

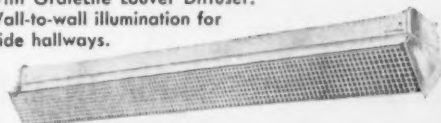


LITE BLOX RECESSED TROFFERS

1' and 2' widths. 8 models fit more than 83 suspension systems. For 1, 2, 3 or 4 lamps. Modular design for unlimited patterns.

V CORRIDOR UNIT

With GrateLite Louver Diffuser. Wall-to-wall illumination for wide hallways.



FLUORESCENT AND INCANDESCENT INDUSTRIAL UNITS



HIGH BAY
Incandescent

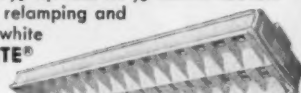


WYTE-LINER
Fluorescent



DOME
Incandescent

Balanced lighting—40% up and 60% down. Louvers hinge at side for easy relamping and cleaning. Shown with white cross-baffles. **GUTHLITE®** similar to E-Lite except Jackknife hinged for super maintenance—easy relamping or cleaning from floor.



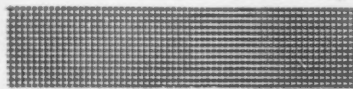
E-LITE

New louvering and diffusing improvements, plus greater latitude in layout. Flexible foot-candle capacity—install two lite rows now, add a third later.



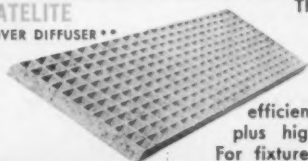
NEW FUTURLITER

The new, crystal-beautiful prismatic louver-lens. Thousands of plastic prisms create ever-changing light patterns. Breathing action assures better maintenance, cooler operation. Available on many fine Guth luminaires.



PRISMOID-GRATELITE®

GRATELITE LOUVER DIFFUSER**



The 3/8" cubes create an entirely new dimension of beauty in lighting, with sight-saving low-brightness, efficient light and air diffusion plus high-intensity illumination. For fixtures or complete ceilings.

THE EDWIN F. GUTH COMPANY

ST. LOUIS 3, MO.

* T. M. Reg. ** © U. S. Pat. No. 2,745,001
U. S. & Can. Pats. Pend., Can. Pat. 1957, No. 538,245

TRUSTED NAME IN LIGHTING SINCE 1902

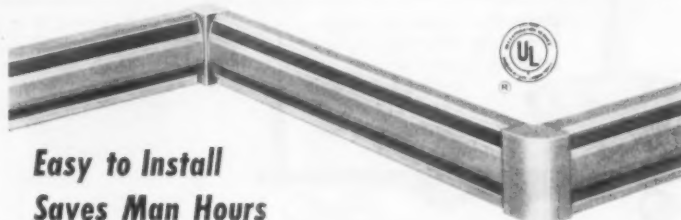
ROSS COMPLETE LINE OF ELECTRICAL ENCLOSURES

ELECTROMODE

Most Complete Line of All-Electric HEATING SYSTEMS SAFE • EFFICIENT • CLEAN for EVERY location

LOW-LEVEL BASEBOARD Electric HEATING

Classically slim Electromode LOW-LEVEL Baseboard fits snugly up to wall. Ideal for residences, offices, hallways, institutions, and other commercial and industrial uses. Controlled by room thermostats. Rugged steel cabinets are finished in handsome golden bronze. Customized fittings permit completely flexible installation to room design.



**Easy to Install
Saves Man Hours**

No Separate End Caps—Easy Access to Wireway—Only 2 Assembly Screws per Unit—Snap-on Front Panel.

Positive safety is guaranteed by the Electromode exclusive Safety Grid heating element, a finned aluminum casting with all electric wires sealed inside. Provides complete protection against fire, shock or burn. Power shut-off safety switch automatically prevents overheating.

ELECTROMODE FLOOR INSERT Electric HEATER



Specifically engineered to provide a wall of rising warm air directly in front of floor-to-ceiling windows where installation of other types of heaters is not practical. Also solves the problem of supplying heat at the base of an open stair well, and on the inner side of an exterior door. Since this model mounts flush with the floor, it causes no interference or obstruction of passageways. The gray enamel grille can be refinished to match floor if desired. Heater may be installed in wood or concrete slab floors. The Heating Unit can be easily removed for cleaning. Heat is furnished by the Electromode exclusive Safety Grid, famous for its positive protection against fire, shock, or burn. A Safety Switch automatically shuts off heat if any article should cover the heater and obstruct the free flow of air.

*REG. U. S. PAT. OFF.

**WRITE TODAY FOR
FULL INFORMATION**



ELECTROMODE HI-heat

**Automatic tape
with**

**Built-in Thermostat
Positive Protection Against Freezing**

Water Pipes—Drain Pipes—Oil Lines—
Mobile Home Plumbing—Farm Water-
ers, etc.

PRE-ASSEMBLED • EASY TO INSTALL
"Complete With Outer Insulation and Friction Tape"



Automatic Cable

**Ends Damage Caused by
Freezing in Sub-Zero Weather**

Stops freeze-ups . . . Keeps eaves and
gutters free of ice . . . Keeps flowers
growing . . . Keeps water flowing . . .
Frees sidewalks, steps and driveways
of ice and snow.

Complete Electromode Line Includes: Baseboard Heaters • Wall and Portable Fan-Circulating Heaters • Radiant Panel Heaters • Insert Duct Heaters • Floor Insert Heaters • Radiant Cable Heat • Suspension-Type Unit Heaters • Combination Portable and Suspension Models • Explosion-Proof Heaters • Milk House Heaters • Pump House Heaters

ELECTROMODE division of Commercial Controls Corp.
DEPT. EPG-59 **ROCHESTER 3, N. Y.**

BOSS... COMPLETE LINE OF ELECTRICAL ENCLOSURES

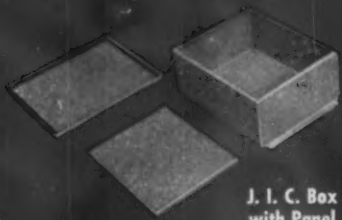


BOSS J.I.C. Wireway and Fittings

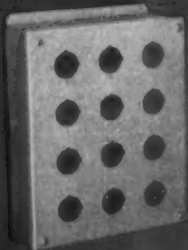
Flanged Hinged Cover Wireway & Fittings

Flangeless Screw Cover Wireway & Fittings

Flangeless Hinged Cover Lay-In Wireway & Fittings



J. I. C. Box
with Panel



Oil Tight
Pushbutton Enclosure

"The Line of Least Resistance"

BOSS

You can always be sure of excellent quality and prompt delivery on stock or "specials" with the complete line of BOSS Boxes, Wireway and Fittings.

Job-engineered for quick, easy installations, BOSS enclosures are code gauge steel, have smooth corners, with firm but easy knockouts. All units are UL approved. Finished in durable gray baked enamel.

BOSS now also offers you new Oil Tight Push Button Enclosures for excellent protection against oil, dirt and liquids.

Write for Catalog on the complete line of BOSS Electrical Enclosures.

Sold thru leading distributors
everywhere.



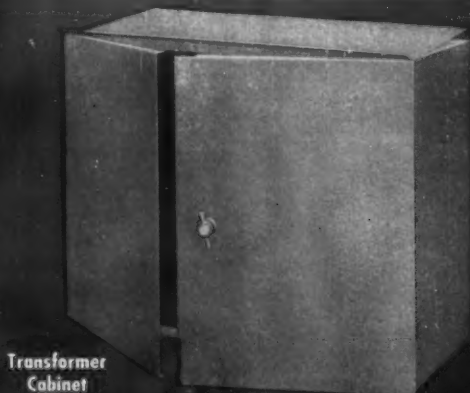
Type "A" Box



Screw Cover Pull Box



NEMA 12 Cabinet



Transformer
Cabinet



Telephone Cabinet

You can rely on BOSS for custom fabrication of your "specials" of any type

THE HUENEFELD CO. Engineered Products Division

2701 SPRING GROVE AVE.

CINCINNATI 25, OHIO

HI POWER SWITCHING

DEPENDABLE

E.Z. SEE DIAL

2 DIRECTION TIME DIAL

EASILY RE-SET

SAVES MONEY

DUALITY

SNAP OUT MECHANISM

SILENT

HEAVY DUTY MOTOR

ALLOY T CONTACTS

U BEAM BLADES

SAVES SERVICE

FAST ACTION





Intermatic

TIME CONTROLS

...the best for every timing need!

RAPID REFERENCE CHART

SERIES	OPERATION	SWITCH	VOLTAGE	AMPS.	INTERMATIC QUALITY FEATURE
T 100	1 to 12 on-off per day	SPST DPST SPDT	125/250 volts	35	Standard ON-OFF switch.
T 170	1 to 12 on-off per day	SPST DPST SPDT	125/250 volts	35	Same as above, plus skips operation on selected days, automatically.
T 180	1 to 12 on-off per day	SPST SPDT	125/250 volts	35	Each on-off period independently adjustable from 5 to 60 minutes.
T 960	1 to 96 on-off per day	SPST SPDT	125/250 volts	20/15	Each on-off period in 15 minute units. Trippers permanently attached to dial.
C 8300	1 to 12 on-off per 12 minutes	SPST	125 volts	15	Timings from 10 seconds to 11 minute, 50 second periods.
T 500-R	1 to 12 on-off per day	SPST DPST	125/250 volts	55	Heavy duty standard ON-OFF switch. Up to 27,500 watts. Also available with "SKIPPER" feature.
T-1100	1 on-off operation per day	SPST	125 volts	15	Flush wall mounted standard ON-OFF switch to central circuits in house or store. (LAMP • LYTER)

WRITE FOR FREE CATALOG OF COMPLETE INTERMATIC LINE



NEW! Intermatic Hi-Fidelity DOOR CHIMES the NEW sound!

for new or remodeling construction . . . styled for any home decor. Modern . . . all models with multiple tones! Flush or surface-mount models. Many finishes.



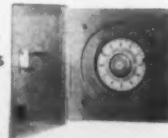
Write for information!

NEW! LAMP • LYTER

the light switch with an electric brain!



FOR HOME AND STORES
flush mounts, controls
post lights, store
lights, signs, other
selected circuits.



INTERNATIONAL REGISTER COMPANY

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*the size,
type,
rating,
quality...*

Illustration, above, shows size relationship of a Hubbell 4-wire, 50 amp. "Twist-Lock" cap and a midget 2-wire, 10 amp. "Twist-Lock" cap... a good indication of the wide range of sizes and ratings available.

Twist-Lock®

...for every purpose

"Twist-Lock", first and still the finest locking connector made, is designed for portable electrical equipment requiring constant contact pressure and safe, secure locking protection and convenience. It is ruggedly constructed to withstand abuse and provide long life service. "Twist-Lock" offers many wiring features which simplify installation and eliminate costly service call-backs.

8 DIFFERENT LINES

"Twist-Lock" represents the safest and most complete quality line of locking connectors ever developed. Caps, connector bodies, motor bases and receptacles are available in the eight different types and sizes shown at right, and in ratings to conform to your electrical specifications.

Every cap and connector body from 10 amp. to 50 amp. is now available with "Seal-Tite" rubber covers for weather-proofing purposes, protection from dust and dirt or from hard knocks and rough usage.

HARVEY HUBBELL, INCORPORATED
BRIDGEPORT 2, CONNECTICUT • IN CANADA: SCARBOROUGH, ONTARIO

REGULAR Twist-Lock

Rugged construction. Regular wiring. Wide range of types and ratings.

SUPER Twist-Lock

Screwless terminals and dead front for faster, safer wiring.

MIDGET Twist-Lock

The same high quality in midget size. Many O.E.M. uses. Wide selection of types and ratings.

GROUNDING Twist-Lock

For 125 v. grounding only. Non-interchangeable with regular "Twist-Lock".

"INSULPRENE" Twist-Lock

Tough neoprene compound resists steam, hot water, grease, acids, etc.

30 AMP. SUPER Twist-Lock

Non-interchangeable with 20 amp. units. Prevents interchange between 20 and 30 amp. service. Screwless terminals and dead front.

50 AMPERE Twist-Lock

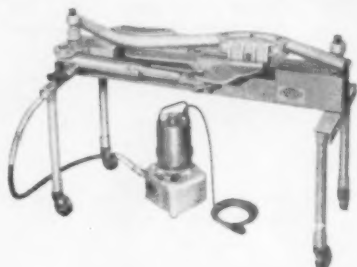
In 600 v. A.C. and 250 v. D.C. Solderless connections. Metal cord grips.

277 VOLT Twist-Lock

Non-interchangeable with other "Twist-Lock" or any other device made. Used for fluorescent lighting.

CHOOSE FROM THIS COMPLETE LINE OF FAST HYDRAULIC BENDERS

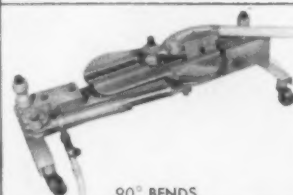
No. 888 multipurpose HYDRAULIC BENDER quickly makes offsets, 90°, 180° bends in ½"-2" conduit, pipe.



A fast, extra-versatile bender for on-the-job or shop bending of steel and aluminum conduit or pipe. Makes offsets in 20 seconds with one setting, one ram stroke . . . 90° bends in one minute close to the end with one ram stroke. Easily, quickly operated by one man with hand or power pump. Send for Bulletin E-234.



OFFSETS



90° BENDS

Fast, lightweight power benders . . . 90° bends with one ram stroke

- High-strength aluminum and steel for minimum weight, maximum strength.
- Easily carried by one man or wheeled on pipe supports.
- Rotating universal pipe supports handle all pipe and conduit sizes. Ram fits GREENLEE thin-wall conduit, tubing, and bus-bar bending attachments.
- Complete range of sizes ½" through 4". Operate in any position.

No. 880 Hydraulic Bender for ½" through 2" pipe and rigid conduit.

No. 883 Hydraulic Bender for ½" through 3" pipe and rigid conduit.

Both operate with GREENLEE 798 Power Pump or 768-M4 Hand Pump.

No. 884 Hydraulic Bender for ½" through 4" pipe and conduit. Operates with GREENLEE No. 798 or No. 797 Power Pump or No. 1726 Hand Pump.



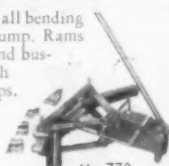
No. 884

Versatile segment-type hydraulic benders

Make bends of varying radii and degree for all bending measurements. Built-in hand hydraulic pump. Rams fit GREENLEE thin-wall conduit, tubing, and bus-bar bending attachments. Can be used with GREENLEE No. 798 or No. 797 Power Pumps.

No. 770 Hydraulic Bender for ½" through 3" pipe and conduit.

No. 775 Hydraulic Bender for ½" through 5" pipe and conduit.



No. 770

Heavy-duty power bender...100 tons' ram pressure

No. 785-BE Hydraulic Power Bender.

A powerful unit for heavier bending. Handles 1½" to 6" conduit or pipe and is rugged enough to bend 5" double extra-heavy 90° with one ram stroke. Built-in hydraulic pump can be driven by either an electric motor or gasoline engine.

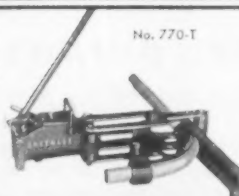


Thin-wall conduit benders . . . fast one-shot 90° bends

GREENLEE thin-wall benders with aluminum shoes and follow bars. Make full 90° bend with one ram stroke without crushing or kinking of thin-wall (E.M.T.) conduit.

Nos. 770-T and 775-T Thin-Wall Conduit Benders. For bending ¾"-2" thin-wall conduit.

Nos. 880-T, 883-T, and 884-T Thin-Wall Conduit Benders. For bending ¾"-2" thin-wall conduit.



No. 770-T



No. 883-T

Bus-bar benders . . . U-bends, 90°, offset bends . . . bar up to

¾" x 6"

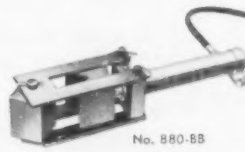
GREENLEE Bus-Bar Benders make accurate bends in a wide range of types and sizes.

Nos. 770-BB, 880-BB, 883-BB Bus-Bar Benders. For bending copper up to ¾" x 4".

Nos. 775-BB and 884-BB Bus-Bar Benders. For bending copper up to ¾" x 6".



No. 775-BB



No. 880-BB

See your distributor or write for catalog.



GREENLEE TOOL CO.,
1749 COLUMBIA AVE.,
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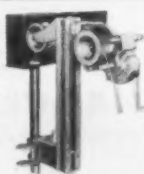
No. 1800 RATCHET HAND BENDER

Easily bend ½", ¾", and 1" pipe and conduit as much as 180°. Ratchet feature permits short, powerful strokes. Swing-away pipe clamp. Base receives threaded pipe legs to form stable, convenient "horse."



CABLE PULLER

A simple compact unit which exerts up to 7500 lb maximum pull. Two speeds. Clamping device fastens directly to conduit—allows pulling in line with conduit, prevents hanger loosening. Attachment for pulling from concealed conduit.



HIGH-PRESSURE HYDRAULIC POWER PUMPS—EXCLUSIVE FAST APPROACH

GREENLEE No. 798 Series...6,000 psi continuous, 10,000 psi intermittent pressure

- Two-speed action. Quick approach of the ram, automatic change-over to fast high-pressure delivery when ram pressure exceeds 150 psi.
- Easily carried by one man. Weighs only 64 lb. High-strength aluminum and steel construction.
- Operates GREENLEE Nos. 770, 775, 880, 883, and 884 Pipe and Conduit Benders, and No. 746 Hydraulic Knockout Punch Driver. Also adaptable to a variety of rams and jacks with manual,

gravity, or spring return of the ram or piston.

- Available with 4-way valve for hydraulic return of ram.

No. 798-AC-SA Power Pump. Powered by built-in ¾-hp dual-voltage 115-230 volt, a-c electric motor.

No. 798-CO-SA Power Pump. Powered by a ½-hp 115-volt ac-dc universal electric motor.

No. 798-GM-SA Power Pump. Powered by a 1.7-hp 4-cycle air-cooled gasoline engine.



No. 798-AC-SA

GREENLEE No. 797 Series...up to 213 cu in. per min. delivery at 10,000 psi

- High-volume delivery means higher speed. Deliver 106 cu in. of oil per minute at 10,000 psi maximum pressure with 2-hp electric motor, 213 cu in. of oil per minute with 3-hp motor.
- Develop 6,000 psi continuous pressure, up to 10,000 psi intermittent.
 - Portable—pump unit on angle iron base.
 - Operate GREENLEE Nos. 770, 775, 880, 883, and 884 Benders and No. 790 Pipe Pusher.

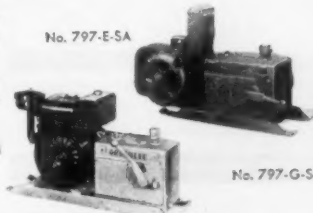
Adaptable to numerous rams, jacks, presses, etc.

- Available with 4-way valve for hydraulic return of ram.

No. 797-E-SA Power Pump. Powered by a 2-hp or 3-hp 1755 rpm 220/440-volt, 3-phase, a-c electric motor.

No. 797-G-SA Power Pump. Powered by a 4 ½-hp 4-cycle air-cooled gasoline engine.

No. 797-E-SA

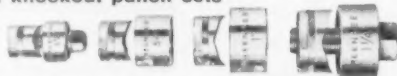


No. 797-G-SA

FAMOUS GREENLEE KNOCKOUT PUNCHES AND PUNCH DRIVERS

For fast, easy enlarging of knockouts or cutting new holes for conduit in metal boxes and cabinets. Complete range of punches to cut holes for ½" through 5" conduit in 10-gauge metal. Slugs drop loose in die—you just tip them out. Hand and hydraulic drives.

Convenient knockout punch sets in leather cases



No. 735 Knockout Punch Set. Four punches packed in leather case for cutting ¾", 1½", 1 11/16", 1 13/16" holes for ½", ¾", 1", 1 ¼" conduit.

No. 737 Knockout Punch Set. Two punches packed in leather case for cutting 1 11/16", 2 ¾" holes for 1 ½" and 2" conduit.

Knockout punches for 2-1/2"—5" conduit

No. 738 Knockout Punch cuts 2 ½" hole for 2 ½" conduit.

No. 739 Knockout Punch cuts 3 ½" hole for 3" conduit.

No. 741 Knockout Punch cuts 4" hole for 3 ½" conduit.

No. 742 Knockout Punch cuts 4 ½" hole for 4" conduit.

No. 743 Knockout Punch cuts 5 ½" hole for 5" conduit.



Ball bearing knockout punch drives... save time, work

GREENLEE ball bearing drives reduce friction and cut to a minimum the time and effort needed to operate GREENLEE Knockout Punches with a wrench. There is a ball bearing drive screw or drive nut to fit every GREENLEE Knockout Punch.



New ratchet driver—6 to 8 times faster than wrench

No. 1804 Ratchet Knockout Punch Driver. Antifriction, fast-lead thread gives 6 to 8 times faster cutting than wrench method. Operates all GREENLEE Knockout Punches for ½" to 3" conduit. Packaged in a metal case with compartment to store 2" and smaller knockout punches. Available with or without punches.

No. 1806 Ratchet Knockout Punch Driver Set. Includes No. 1804 and six GREENLEE Knockout Punches for ½" to 3" conduit.



Hydraulic driver... for all GREENLEE Knockout Punches

Makes openings in seconds, through 10-gauge metal. A portable hydraulic unit specifically designed for driving all standard GREENLEE Knockout Punches. Develops 11 tons of ram pressure. Available separately or in handy portable sets.

No. 7646-A Hydraulic Knockout Punch Driver complete with hydraulic pump, ram, and die sleeves, in metal box.

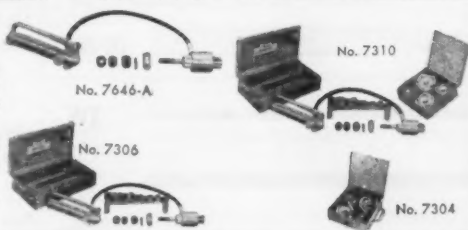
No. 7306 Hydraulic Knockout Punch Driver Set includes No. 7646-A and six

punches for ½" to 2" conduit in metal box.

No. 7310 Hydraulic Knockout Punch Driver Set includes No. 7646-A and ten punches for ½" to 4" conduit in two metal boxes.

No. 7304 Set of Four Knockout Punches, only, for 2 ½", 3", 3 ½", and 4" conduit in metal carrying case.

No. 743 Knockout Punch, only, for 5" conduit.



ONE-SHOT HYDRAULIC KNOCKOUT PUNCH DRIVERS

Eliminate pre-drilling and step-up punching. C-frame fits around edge of junction box. Hand or power-pump operated. Two models for ½", ¾", 1" punches and 1 ½", 2" punches.



BORING TOOLS

Complete line of power and brace bits and extensions for fast, accurate boring

See your distributor or write for catalog.



GREENLEE TOOL CO.,
1749 COLUMBIA AVE.,
ROCKFORD, ILL.

Index of Phelps Dodge

Wires and Cables	Type Letter	Habirshaw Trade Name or Designation	Maximum Operating Temperature	USE
	R	Flamestop Code	60 C (140 F)	Dry Locations
	RF	Flamestop Code	60 C (140 F)	Fixture Wire
	RH	Flamestop Heat-Resistant	75 C (167 F)	Dry Locations
	RW	Flamestop Moisture-Resistant	60 C (140 F)	Dry and Wet Locations
	RH-RW	Flamestop Heat or Moisture-Resistant RH-RW	75 C (167 F) as RH	Dry Locations as RH
			60 C (140 F) as RW	Dry and Wet Locations as RW
	RHW	Flamestop Heat and Moisture Resistant	75 C (167 F)	Dry and Wet Locations
	RHH	Flamestop Heat-Resistant	90 C (194 F)	Dry Locations
	RL	Rubber Lead	60 C (140 F)	Wet Locations and other Special Conditions
	RHL	Heat Resistant Rubber Lead	75 C (167 F)	Wet Locations and other Special Conditions
	NM	PD-X Nonmetallic-Sheathed Cable	60 C (140 F)	For Wiring Houses, Rural Buildings, Small Stores, and Shops.
	UF	Perma-Dure Nonmetallic-Sheathed Cable	60 C (140 F)	UF: Underground Feeder and Branch Circuit Cable for Direct Burial.
	UF-NMC			NMC: For Interior Wiring in Moist or Corrosive Locations.
	TW	Habirdure Thermo-plastic Insulated	60 C (140 F)	Dry and Wet Locations
	TF		60 C (140 F)	Fixture Wire
	TW	Petro-Dure Thermo-plastic Insulated Nylon Jacketed	60 C (140 F)	Moist locations and where exposed to mineral oil, liquid gasoline and gasoline vapor.
	None	Habirdure Machine Tool, Control, and Switchboard Wire	90 C (194 F) in air 80 C (176 F) in oil	Machine Tool, Control and Switchboard Wiring

PHELPS DODGE COPPER PRODUCTS CORPORATION

Wires and Cables



Wires and Cables	Type Letter	Habirshaw Trade Name or Designation	Maximum Operating Temperature	USE
	None	Habirdure Appliance Wire	105 C (221 F) IN AIR 80 C (176 F) IN OIL	Appliance Wiring
	SE	Service Entrance Type SE—Style U Unarmored	75 C (167 F)	Service Entrance or Combination Service Drop & Service Entrance
	SE	Service Entrance Type SE—Style A Armored	75 C (167 F)	Service Entrance or Combination Service Drop & Service Entrance
	SD	Service Drop Type SD	60 C (140 F)	Service Drop
	USE	Service Entrance Type USE	60 C (140 F)	Underground Service Entrance, Direct Burial.
	V	Varnished Cambric Braided	85 C (185 F)	Dry locations only. Smaller than No. 6 by special permission.
	VL	Varnished Cambric Lead	85 C (185 F)	Wet or Dry locations. Smaller than No. 6 by special permission.
	None	Type RR	75 C (167 F) Low Voltage 85 C (185 F) High Voltage	General Purpose for Direct Burial, Aerial, Conduit and Underground Duct Installations.
	S or SO	Hard Service Cord	60 C (140 F)	Pendant or portable extra hard usage in damp locations; SO for oil resistance.
	SJ or SJO	Junior Hard Service Cord	60 C (140 F)	Pendant or portable hard usage in damp locations; SJO for oil resistance.
	SP (Formerly POSJ)	All Rubber Parallel Cord	60 C (140 F)	For use in pendant or portable applications in damp locations not subject to hard usage.

HABIRSHAW BUILDING WIRES AND CABLES

O.Z. ELECTRICAL MANUFACTURING CO.

Sales Office and Warehouse
406 So. Cicero Avenue
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Esterbrook 9-0326

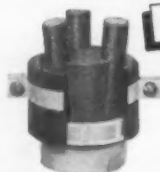
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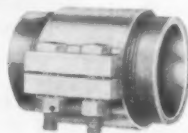


CABLE SUPPORTS
CONDUIT TYPE

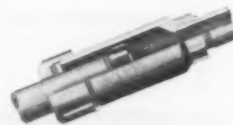


CABLE SUPPORTS
SPLIT TYPE

CONDUIT FITTINGS



SPLIT
COUPLINGS



EXPANSION
FITTINGS



INSULATED
BUSHINGS

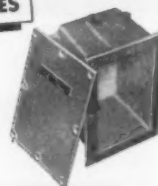


BAKELITE
BUSHINGS

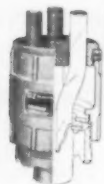
CAST IRON BOXES



EXPLOSION-PROOF
TYPE

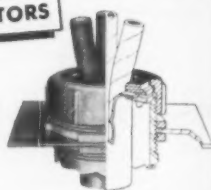


WEATHERTIGHT
SUBMERSIBLE TYPE



TERMINATING
POTHEADS

CABLE TERMINATORS



SEALING
BUSHINGS

INTERLOCKED ARMOR CABLE FITTINGS



TERMINATORS



SPLICING
FITTINGS

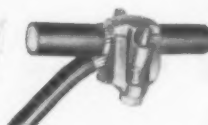


COMBINATION
LUGS

SOLDERLESS CONNECTORS



COMBINATION
TWO-WAY
CONNECTORS



SERVICE
TAP



COMBINATION
TEE AND
PARALLEL CONNECTORS

POWER CONNECTORS



T-CONNECTORS, TUBE
TO MULTIPLE CABLE TYPE



BUS BAR
CLAMPS

GROUND CONNECTORS



CABLE TO PIPE OR ROD
90° OR PARALLEL



CABLE TO
FLAT BAR

They're O. K. if They're O. Z.

SAFE and SURE...

a **SLIPKNOT** **SPLICE**



Always fresh, exceeding all ASTM electrical specifications. Slipknot has been the standard of the industry for more than half a century. Extra adhesive strength assures best work, even on rough and irregular surfaces. Non-raveling, never dries out . . . results of rigid quality control and tremendous volume.

The quality tapes of



The only commercial rubber tape with the U.L. Label, P R Splicing Compound fuses instantly, conforms without voids to any irregular shape, and will not dry out. Complete electrical protection—perfect companion to Slipknot Friction Tape.

the experienced electrician

Inseparable fusion of adhesive to vinyl base means easier, swifter, surer, more permanent splicing than ever before! Slipknot Plastic Tape has wider temperature working range — no creeping or thinning — abrasion resistance — resists water acids, alkalies, oils, corrosion. Molds totally around any shape. No. 7 (.007" thick) has minimum dielectric strength of 10,000 volts.

The 66-foot roll, in individual can, comes with **FREE** exclusive Slipknot Cutter. (patented)



Send for catalog and specification data to Division 15

PLYMOUTH RUBBER COMPANY, INC.

CANTON,

QUALITY SINCE 1896

MASSACHUSETTS

6 bonuses

bonus NO. 1 . . . EXTREME QUIETNESS

Quiet transformer operation with low loss is a blessing and a real source of satisfaction to building owners, managers, top executives, employees and patrons. Therefore a superior low noise level is an extremely important reason why you should specify and/or install PTC transformers on all jobs.

Look at these PTC low noise levels as they compare with present and recommended NEMA specifications.

KVA Transformer Rating	Present NEMA	Precision Average Sound Level Standard Design	Precision Average Sound Level Special Design
9-30	50	40	34
37½-112½	55	42	38
125-167	60	44	42
200-300	62	48	46

To recognize the extreme quietness of PTC transformers it is best to compare them in decibel sound level ratings with those of typical sounds familiar to everyday life.

FOR EXAMPLE:

60-70 decibels—the sound of one typewriter or average traffic sounds 100 ft. away.

50-60 decibels—the sound of a vacuum cleaner or moderate restaurant clatter.

40-50 decibels—the noise to be found in an average residence or in normal conversation.

30-40 decibels—low conversation in a residence in the evening.

bonus NO. 2 . . . EFFICIENCY

Transformer losses cost money. Precision transformer cores **1** use the lowest loss steel available. Precision transformers are wound with low resistance copper wire and designed for the greatest possible operation economy. These features reduce losses and save dollars not once, but year after year.

bonus NO. 3 . . . OVERLOAD CAPACITY

Precision transformers are designed with large open ducts **2** for efficient cooling and operate at lower temperatures than specified in national standards. Superior PTC insulation materials, varnishes and wire enamels actually permit operating temperatures in excess of these standards with no loss of life. These factors together with low losses give Precision transformers unequalled ability to handle overloads.

bonus NO. 4 . . . DEPENDABILITY AND LONG LIFE

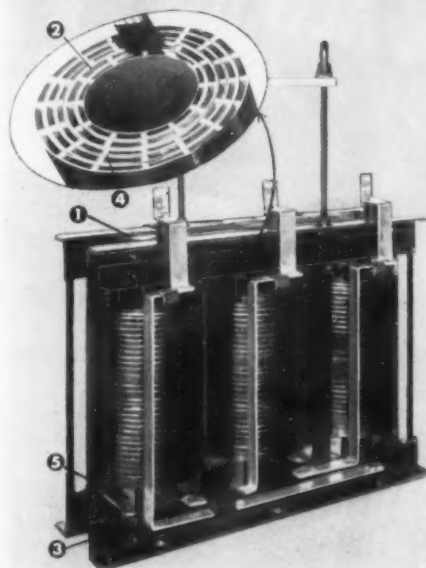
Dependability and long life can result only from ADVANCED DESIGN and BUILT-IN QUALITY. PTC transformers excel because they are constructed to meet the varying conditions under which they must be used. Additional PTC features are:

- Core laminations are clamped together with structural steel **3** rather than formed sheet steel for more rugged construction.
- Glass laminate duct spacers **4** used provide greater toughness, rigidity, dimensional stability, and moisture resistance far in excess of wood or paper phenolic laminate spacers.
- Coils are thoroughly clamped and braced around the core with fibre-glass laminate insulating blocks **5** resulting in greatest structural and tensile strength.
- Coils are made with an interlayer and interwinding insulation of Mylar-Quinterra and glass, assuring high dielectric strength, low moisture absorption and high temperature stability characteristics.

when you specify
and/or install

PTC

TRANSFORMERS



bonus NO. 5 . . . REDUCED INSTALLATION EXPENSE

Well designed and easily accessible mounting provisions together with ample connecting space and simple wiring termination mean neater installations at lower than normal cost.

bonus NO. 6 . . . THE ONLY 5-YEAR UNCONDITIONAL GUARANTEE IN THE INDUSTRY

Your reputation as an electrical engineer or contractor depends upon YOUR ability to stand firmly behind your recommendations and installations.

It is reassuring to know that PTC transformers work because PTC people make them work — then stand unconditionally behind them.

WHISPER-QUIET INSIDE-THE-WALL INSTALLATION

Precision Transformer Corporation has developed a unit which installs *inside-the-wall* in otherwise unusable space. Precision's "HUSH-FLUSH" design permits easy, full accessibility, lowest noise level close to lead power service. Saves material and labor costs. Ideal for schools, libraries, hospitals, churches, theatres, etc. — wherever noise *must* be eliminated.

Complete Line—DRY and LIQUID Types

Whatever your transformer needs, there is a dependable, quiet, long-lasting dry or liquid type transformer . . . more than 4,000 models ranging from ¼ to 5,000 KVA.

Write today for 4-page brochure providing details on the PTC line.

PTC

TRANSFORMERS

- QUIET
- EFFICIENT
- DEPENDABLE

PRECISION TRANSFORMER CORP.

2216 West Lake Street

Chicago 12, Illinois

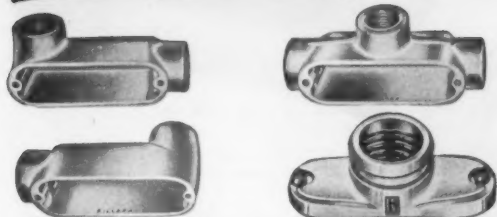
Representatives in all principal cities

SPECIFY

Killark

THE ALL-ALUMINUM LINE

CONDUIT BODIES AND COVERS

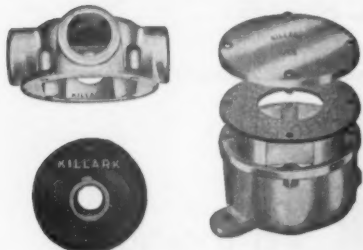


- Non-rusting, non-corroding—weather and industry proof, clear through!
- 60% Lighter than iron—easier to handle.
- Smooth Inside and Out—prevent wire and hand skinning.
- Clean-Cut Threads—precise fit, easier installation.
- Non-Sparking—never any danger of fire or explosion.

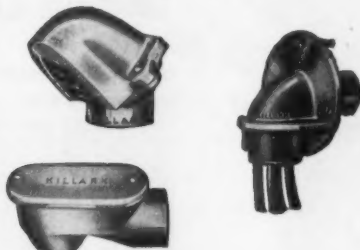
EXPLOSION-PROOF FITTINGS AND SWITCHES



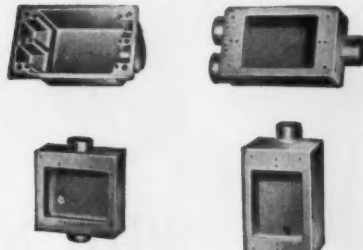
ROUND FITTINGS AND COVERS



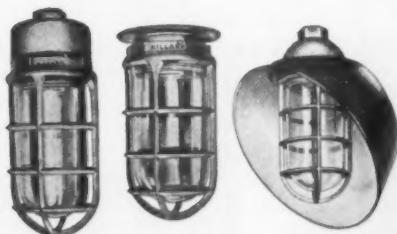
SERVICE ENTRANCE FITTINGS



FLUSH SWITCH FITTINGS



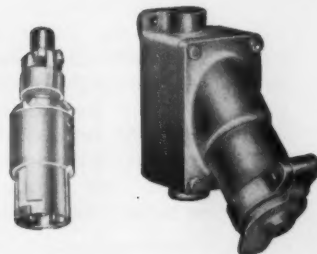
VAPOR-TIGHT LIGHT FIXTURES



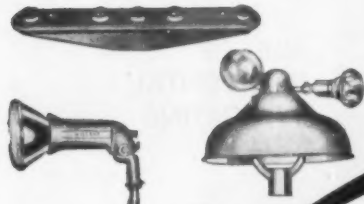
EXPLOSION-PROOF LIGHT FIXTURES



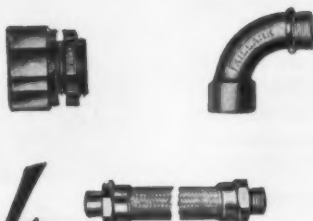
EXPLOSION PROOF PLUGS AND RECEPTACLES



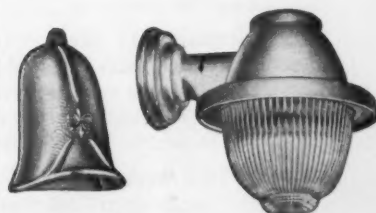
SEALED BEAM FIXTURES



ACCESSORIES



SPECIAL FIXTURES



Killark

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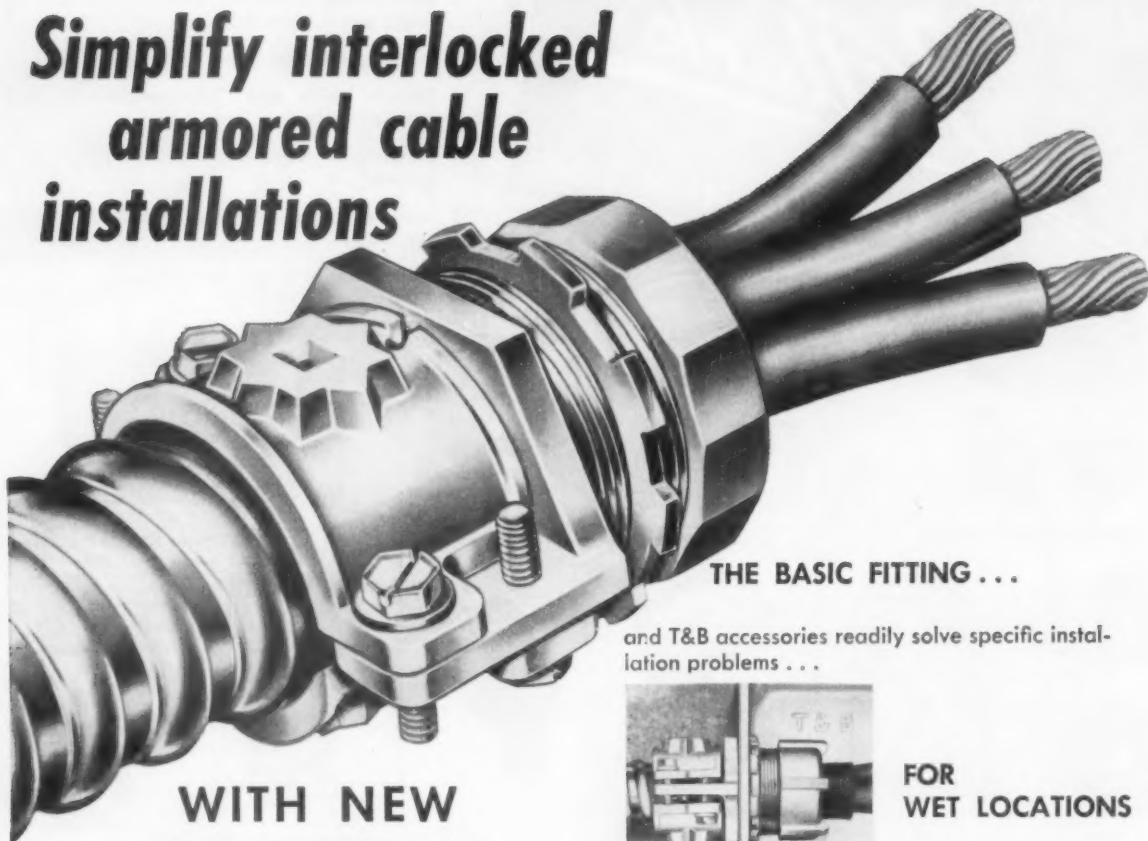
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Simplify interlocked armored cable installations



WITH NEW T&B FITTINGS

Each size of the new T&B Interlocked Armored Cable Fittings accommodates twice the previous range of cable sizes. They eliminate the problem of armored cable OD that is too large or too small for the fitting. The extra armor stop in T&B Interlocked Cable Fittings and the independently-bolted twin saddles make it possible to accommodate a wide range in armor diameters. The saddles are serrated for positive grip.

For dry or wet locations — T&B Armored Cable Fittings are available for both terminating in boxes or dead-ending, in both dry and damp locations. (Damp location fittings have a neoprene bushing, retainer ring and gland nut to keep out moisture.)

Other advantages: **1)** Fewer connectors are required to accommodate the full range cable sizes. Fewer items in stock. **2)** There is only one connector for each hub thread size. **3)** The basic connector and its accessories are engineered to achieve **LOWEST INSTALLED COST.**

All T&B products available only through authorized T&B distributors

THE THOMAS & BETTS CO.

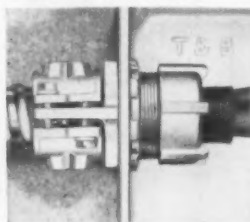


34 Butler Street, Elizabeth 1, New Jersey
Thomas & Betts, Ltd.,
Montreal, P.Q., Canada

MANUFACTURERS OF FINE ELECTRICAL FITTINGS SINCE 1898

THE BASIC FITTING . . .

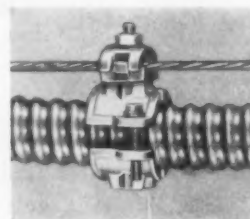
and T&B accessories readily solve specific installation problems . . .



FOR WET LOCATIONS



FOR GROUNDING



FOR HORIZONTAL SUPPORTING



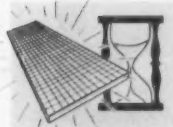
FOR VERTICAL SUPPORTING

For complete details, contact your local T&B distributor or write for Catalog 1A2.

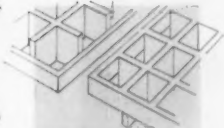
american!

...the three

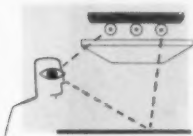
OUTSTANDING LOUVERS FOR ANY LIGHTING DESIGN



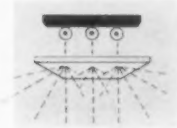
COLOR STABILITY



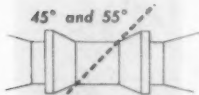
INTERLOCKING



LOW SURFACE
BRIGHTNESS



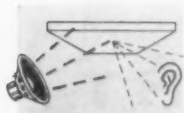
HIGH ILLUMINATION
VALUE



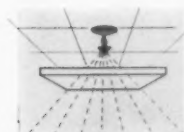
IDEAL SHIELDING



LIGHTER WEIGHT



NOISE REDUCTION



SAFE FOR
SPRINKLER SYSTEMS

New! 55° x 55° Cutoff Interlocking Plastic Louvers—For maximum shielding—Ideal for high lighting levels with perfect diffusing qualities. Dimensions 23 $\frac{3}{4}$ " x 47 $\frac{3}{4}$ ".

45° x 45° Cutoff Interlocking Plastic Louvers—Dimensions 23 $\frac{1}{2}$ " x 47 $\frac{1}{2}$ ".

45° x 45° Cutoff Interlocking Plastic Louvers—Dimensions 10 $\frac{3}{4}$ " x 47 $\frac{3}{4}$ ".

American Plastic Louvers offer the maximum in conformability for any lighting plan, whether it be industrial, institutional, commercial or retail. In application they may be employed in individual fixtures, full ceiling installations or any modular pattern.

LOUVERS IN WHITE, ALSO AVAILABLE IN PASTEL COLORS, PINK—GREEN—YELLOW—BLUE AND LOW BRIGHTNESS.

Only the exclusive process of the American Louver Company is covered by these patents:

USA Pat. No. 2,566,817
USA Pat. No. 2,607,455

Canadian Pat. No. 484,346
Canadian Pat. No. 497,047

Available in combination of sizes and subject to modifications.

american plastic louvers

MECHANICAL

Tensile Strength
Elongation at Break
Modulus of Elasticity
Hardness
Flexural Strength
Deflection at Break
Impact Strength
 $\frac{1}{2}$ " x $\frac{1}{2}$ " Notched
 $\frac{1}{2}$ " x $\frac{1}{2}$ " Gate End Notched
 $\frac{1}{2}$ " x $\frac{1}{2}$ " Dead End Notched
Machining

THERMAL

Thermal Expansion
Heat Distortion
Deformation Under Load

OPTICAL

Light Transmission \pm 1040 Pigmentation
0.050" thick
0.100" thick
0.150" thick

PHYSICAL

Specific Gravity
Moisture Absorption
Burning Rate (0.050" thick)

ELECTRICAL

Dissipation Factor
Dielectric Constant
Dielectric Strength
Volume Resistivity

Units

Lbs. per sq. in.
Percent
In tension lbs./sq. in.
Rockwell
Lbs. per sq. in.
Inches

Izod, ft. lbs. per in. of notch
Izod, ft. lbs. per in. of notch
Izod, ft. lbs. per in. of notch

In./in. per °C.
°F at 264 psi
% at 4000 psi at 50°C.
% at 2000 psi at 50°C

Percent Transmission @ 550 mμ
" " " " " "

Percent
In./min.

10³ cycles
10³ cycles
Volts/Mil, $\frac{1}{8}$ " thick
Ohm/cm

Formulation HF 77-1040

6500-8000
1.8-2.4
4-5 x 10³
M70-80
9000-13,000
0.15-0.35

0.25-0.35
0.60-0.70
0.30-0.40
Average

6-8 x 10³
183-191
0.8-1.0

52
38
29

1.04-1.06
0.03-0.04
1

0001-0005
2.45-2.65
400
10¹²-10¹⁴

ASTM

D638-52T
D638-52T
D638-52T
D785-51
D790-49T
D790-49T

D256-47T
D256-47T
D256-47T

D696-44
D648-45T
D821-51
D821-51

D792-50
D370-42
D635-44

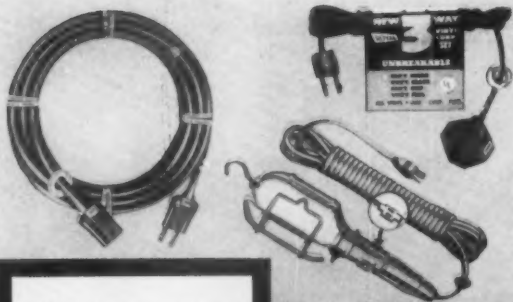
D150-47T
D150-47T
D149-44
D257-52T

The above data represent average values determined on virgin molding powder under appropriate A.S.T.M. tests conducted in the present range of Lustrex Permamate® colors, formulations

* Lustrex Permamate Reg. U.S. Pat. Off.
Monsanto Chemical Company

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... Hundreds of staple and specialty cords in stock ... a quality-engineered product for every need. Heavy Duty "Power-Kords" — Range and Dryer Cords — Cube Tap and Special Extensions — Appliance Cord Sets — Trouble Lights.

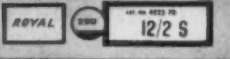
ROYAL WIRING DEVICES

... many outstanding items in modern, unbreakable vinyl: PVC Caps and Connectors (both Royalok® and Parallel) — Vinyl 3-to-2 Wire Adapters — Vinyl-Covered Weatherproof Sockets ... also "Flip-Tite" Weatherproof Plates, Receptacles, Switches — Range and Dryer Receptacles — Chrome Wall Plates.



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... always top quality, properly packaged, clearly labeled. Portable Cords (rubber, neoprene, plastic) — Lamp and Fixture Wires — Flexible Cords — Machine Tool Wire — Thermo Cable — Coaxial Cable.



ROYAL FUSES

... a complete line — all carrying the recognized and accepted Royal brand. "Crystal" Plug Fuses — SHOK-ABSORBER Time Delay Plug Fuses — Renewable and Non-Renewable ROYAL-NOARK Cartridge Fuses — ROYAL-LAG Dual Element Cartridge Fuses — FUSTATS.



"IDEAL" FLUORESCENT STARTERS

... full range of sizes ... quick starting ... dependable — including Automatic and Manual Resets. Also "ACE" brand promotionally-priced starters.



ROYAL MAKES 'EM RIGHT

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And you're right, too, if you insist on the Royal brand on the electrical supplies you use. Stocked by major wholesalers everywhere. Ask your supplier for Royal catalogs, and specify ROYAL when you buy.

ROYAL

ELECTRIC 

... an associate of

ROYAL ELECTRIC CORPORATION • Pawtucket, Rhode Island



MAKE THIS STEELDUCT TEST...

BEFORE YOU BUY RIGID GALVANIZED CONDUIT

Hand run a coupling on Steelduct uniform galvanized threads. The coupling will run free but not loose. Steelduct galvanized threads are sharp and clean because the Steelduct galvanizing process produces a measured uniform coating, free of any excess deposits of zinc. Uniform galvanized threads by STEELDUCT cut installation costs by eliminating rusty threads and assuring free running couplings.



THE STEELDUCT COMPANY

REPUBLIC STEEL BUILDING

YOUNGSTOWN, OHIO

SELECTOR GUIDE

Sierra

SPECIFICATION GRADE

WIRING
DEVICES

SILENT MERCURY SWITCHES



TOP OR BACK WIRED

No moving blades or springs to fail. Each switch individually tested to assure perfect performance. Exclusive Sierra feature permits top or back wiring. Red identification stripe for proper mounting.

New Sierra-lite Mercury Switches, with lighted toggle that glows in the dark, available in single pole, 5005; and three-way 5006.

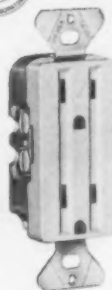


RATINGS	125V. "T"	250V.	125V. AC
	10 AMP.	5 AMP.	15 AMP.
SPECIFICATION GRADE	TOGGLE		
	DESCRIPTION	IVORY	BROWN
	Single Pole	5001	5001X
	Double Pole	5002	5002X
	Three-Way	5003	5003X
	Four-Way	5004	5004X

SIERRAPLEX



SIERRAPLEX is a registered trade name for a new line of distinctively designed receptacles. Clean and modern, they complement any decor—and are built only to the exacting Specification Grade standards, your visual proof that only the finest has been installed.



DESCRIPTION	PARALLEL SLOTS 15A-125V		TANDEM SLOTS 15A-250V	
	IVORY	BROWN	IVORY	BROWN
BACK AND SIDE WIRED				
Single Grounding-Type 3-wire	1600	1600X	1601	1601X
Duplex Grounding-Type 3-wire	1800	1800X	1801	1801X
Comb. Duplex Grdg-Type 3-wire	15A 125V-250V	1850	1850X	
Single Convenience 2-wire	1500	1500X	1501	1501X
Duplex Convenience 2-wire	1700	1700X	1701	1701X
SIDE WIRED				
Single Grounding-Type 3-wire	1602	1602X	1603	1603X
Duplex Grounding-Type 3-wire	1802	1802X	1803	1803X
Comb. Duplex Grdg-Type 3-wire	15A 125V-250V	1852	1852X	
Single Convenience 2-wire	1502	1502X	1503	1503X
Duplex Convenience 2-wire	1702	1702X	1703	1703X
Triplex—Single Circuit	1900	1900X	—	—
Triplex—2 Feeds—1 Return	1901	1901X	—	—
Triplex—2 Feeds—2 Returns	1902	1902X	—	—

SIERRA



SIERRA receptacles offer the same high quality and craftsmanship as the Sierraplex line. All are Specification Grade, with smooth conventional styling.



BACK AND SIDE WIRED				
Single Grounding-Type 3-wire	1200	1200X	1201	1201X
Duplex Grounding-Type 3-wire	1400	1400X	1401	1401X
Comb. Duplex Grdg-Type 3-wire	15A 125V-250V	1450	1450X	
Single Convenience 2-wire	1100	1100X	1101	1101X
Duplex Convenience 2-wire	1300	1300X	1301	1301X
SIDE WIRED				
Single Grounding-Type 3-wire	1202	1202X	1203	1203X
Duplex Grounding-Type 3-wire	1402	1402X	1403	1403X
Comb. Duplex Grdg-Type 3-wire	15A 125V-250V	1452	1452X	
Single Convenience 2-wire	1102	1102X	1103	1103X
Duplex Convenience 2-wire	1302	1302X	1303	1303X

The world's most complete line of

WALL PLATES

Over 3,000 wall plates in Plastic, Brass and Stainless Steel are available from stock to meet your requirements. You choose from the world's most complete line: more styles, colors, finishes, combinations and multiple gangs. Special wall plates crafted to your requirements.



PLASTIC
"D" LINE



PLASTIC
"P" LINE



STAINLESS STEEL
"S" LINE




BRASS
"B" LINE

SIERRA ELECTRIC CORPORATION



P.O. Box 85 • GARDENA, CALIFORNIA



* Approved by
Underwriters'
Laboratories, Inc.

2 great
new designs
for
fluorescent
lighting
support

by

KINDORF

* **SURFACE RACEWAY SYSTEM**

Specially designed for use as a combination surface raceway and flush-mounting fluorescent fixture support. Completely enclosed from outlet box to fixture to eliminate the clutter of external conductors, this system also protects the wiring from physical damage. It's simple "slot-up" design makes it easy to install . . . easy to wire.

SIMPLEX SYSTEM

A fluorescent fixture support system only, its channel is applied slot-side down, and is not intended for use as a raceway. This system combines economy of investment with maximum strength and rigidity. It is easy to install and fixtures may be attached, or relocated, without lowering, or otherwise disturbing the basic channel assembly.

Write for our
product bulletin g-2.
"STEEL CITY lighting supports
(Kindorf channel type)."



designed by electrical engineers
made by a leading electrical manufacturer
for the electrical trade.

products of

**STEEL CITY
ELECTRIC COMPANY**

PITTSBURGH 33, PA.

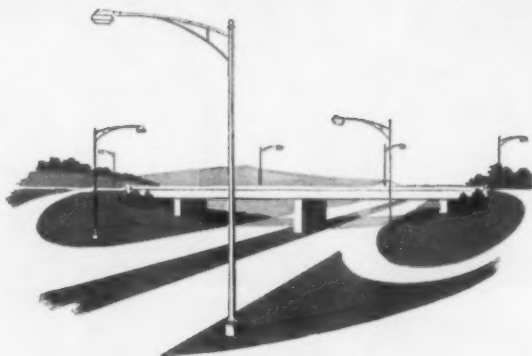
for street lighting • highway lighting • floodlighting

UNION METAL MONOTUBE POLES



Monotube street lighting poles . . . steel or aluminum . . . round or fluted . . . davit or bracket styling . . . anchor or transformer base. Attractive in any location. Continuous-tapered Monotube poles are available in a broad range of designs and sizes to meet all requirements.

Monotube highway lighting poles are offered for various mounting heights and strength requirements. Easily wired and installed. Steel Monotubes are made from high grade, open hearth steel and cold-rolled for strength. Aluminum poles are made by the spinning method.



Monotube floodlighting poles . . . for sports, business, industrial or recreational areas. Available in heights from 20 to 100 feet. Monotube designs permit extreme flexibility in arrangement and number of light units per pole. Floodlights can be mounted, positioned and wired while pole is on the ground.


THE UNION METAL MANUFACTURING COMPANY

CANTON 5, OHIO

BRAMPTON, ONTARIO, CANADA

Monotube Lighting Poles



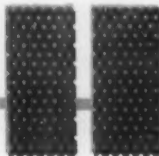


**Demand HUSKY
Cable Support Systems
for exclusive
"Long-Span" Savings!**

Reduces Structural Supports 50%!

When the chips are down, it's the *installed* cost that counts . . . whether it is a self-grounding, maintenance free Husky extra-strength cable support system or an ordinary one. And now, Husky brings you the substantial time, labor and material savings of "Long-Span" Design.

Want proof and details? Write for "Long-Span" Design data or send us your cable support problem (indoor-outdoor) for analysis.



Representation from coast to coast

HUSKY PRODUCTS, INC.

5304 Vine Street Cincinnati 17, Ohio

ELECTRICAL CONSTRUCTION AND MAINTENANCE . . . MID-SEPTEMBER, 1959

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HUSKY PRODUCTS
Representative
on your next cable
support installation**

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Osgood & Assocs., Inc.,
988 Spring St., N. W.,
Atlanta 9
- INDIANA, KENTUCKY (West)
Engineering Products,
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Indianapolis 19
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Get the full-line story of Victor Lusterline Range Hoods and Ventilating Fans and the 32 models of Visitune Chimes.

Victor Lusterline is the one fan and hood line with BONDORIZED metal parts—the guarantee of protection against corrosion, moisture and grease, the assurance of lasting fine appearance. All bear the U/L Label.

Victor-Lusterline is the line backed by the \$30,000,000 Victor warranty and the 5-year fan guarantee.

Visitune chimes are created and color styled by leading designers for every style of home, for every purpose in the home. They are fully warranted, and carry the U/L Label.

Just be sure you're not missing an opportunity to offer the full line of Range Hoods, Fans and Chimes . . . SEND FOR YOUR CATALOGS NOW.



Your guarantee of quality-
Triangle makes many
types to one standard...
IT MUST BE RIGHT!



**VARNISHED CAMBRIC
CABLES**



**RUBBER &
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CABLES**



**INTERLOCKED
ARMOR CABLES**



BUILDING WIRE



CONDUIT



AIRPORT LIGHTING CABLE
CAA Specification L-824
APPLIANCE WIRE
Thermoplastic, U/L
ARMORED CABLE
Type ACL, U/L
ARMORED LEAD CABLE
Type ACL, U/L
BUILDING WIRE
All Types, U/L
CATHODIC PROTECTION CABLE
Polyethylene Insulation, PVC Sheath
CONDUIT
U/L. Rigid Steel, Hot-Dipped Galvanized
or black Enameled; Flexible Steel,
Hot-Dipped Galvanized; EMT,
Electro-Galvanized
CONTROL CABLES
IPCEA. Rubber, Thermoplastic or VC
Insulation; Braid, Neoprene,
Thermoplastic or Lead Sheath
FIXTURE WIRE
All Types, U/L
SUBMERSIBLE PUMP CABLE
Rubber Insulation, Neoprene Sheath
WEATHERPROOF LINE WIRE
Neoprene or Polyethylene Type
NON-METALLIC SHEATHED CABLES
Types NM, NMC-UF, U/L
PARKWAY CABLES
IPCEA. Rubber or VC Insulation; Lead or
Neoprene Sheath; Flat, Plain Steel,
Galvanized, or Steel Armor
POWER CABLES
IPCEA. Rubber or VC, or Asbestos and VC
Insulation; Braid, Neoprene Lead
Sheath or Interlocked Armor
SERIES STREET LIGHTING CABLE
IPCEA. Rubber or Thermoplastic
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or Lead Sheath.
SERVICE CABLES
Service Entrance, Type SE Styles A, U.
Type USE, Style RR Service Drop Type SD,
Style SDC. Self-supporting Service Drop:
Neoprene or Polyethylene Insulation;
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TREE WIRE
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New Brunswick, N. J.

*Manufacturers of Arteries for Electricity,
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NOW! TWO MODELS FOR NEW VERSATILITY

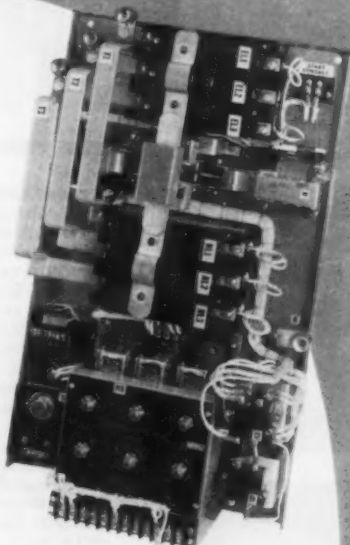
TRANS-O-MATIC* *dual circuit breaker* TRANSFER SWITCHES

NO NEUTRAL POSITION

DOUBLE SOURCE CONTROL

For higher current interrupting capacities, rely on the motor-operated Trans-O-Matic. For low current service, employ the new low-cost solenoid-operated T-100-A. Both are electrically operated . . . mechanically held, with no neutral position. Both feature Lake Shore's exclusive mechanically-linked dual circuit breaker design for *positive* two-position transfer.

Available in 2-pole, 3-pole total failure, partial failure, and under voltage protection, with many optional features.



SOLENOID OPERATED

To 600 volts, 100 amps AC with interrupting capacities to 15,000 amp rms.

MOTOR OPERATED

To 600 volts, 800 amps AC with interrupting capacities to 100,000 amp rms.†

† With current limiting fuses.

Request Bulletins 07400-07500

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THE

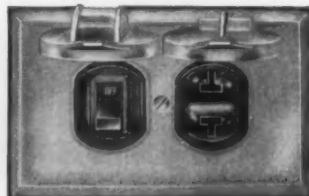
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208 Willis Street BEDFORD, OHIO

**REDUCE COST
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Exclusive **BELL**
Weatherproof Combination
with 2 SAF-T-LOK SNAP COVERS
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**1-GANG PLATE ELIMINATES
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Versatile single pole switch and "T" slot independent of one another, on same circuit! Heavy-duty switch, "T" rated—receptacle with double wipe contacts. Also available with 3-wire polarized grounding outlets.

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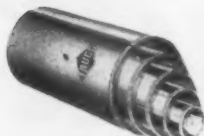
Model G-1 with AIR motors; 250, 500 or 1000 rpm.

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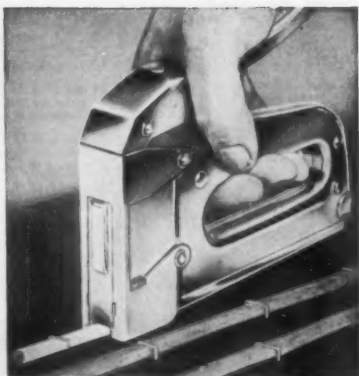
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Faster! Cheaper! Hold Better!

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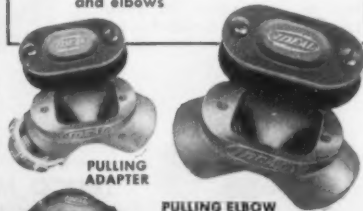
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For electroplating tanks, water solutions, alkali cleaning tanks, mineral oil, vegetable oil, wax or paraffin, fuel oil preheating, solvent vapor cleaning tanks.

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For accurately controlled heating of water, oils, heat transfer media, steam, air or other gases, heating rinse water, steam accumulators, process kettles, showers and washrooms, preheating fuel oil.



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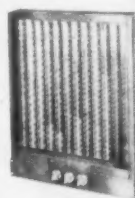
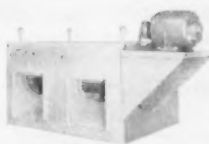
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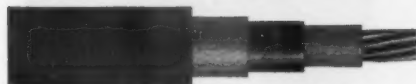


Tiger Brand Electrical Wire & Cable **Wire Buyers Guide Sheet**

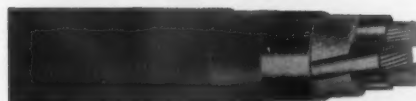
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Tiger Brand Paper Cable—Premium quality cable for high voltage use. Regular copper-bearing lead or tellerium lead sheaths available—both protected during manufacture by blanket of inert gas to prevent formation of oxides. All constructions available including neoprene (glass-reinforced) and plastic sheaths.



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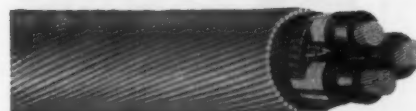
Tiger Brand Varnished Cambric Cable—Furnished in braided coverings (for dry installations), lead sheaths (for underground distribution), or armored coverings (for exposed work). Versatile, dependable, rugged, and economical "work horse" of standard insulations.



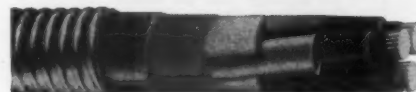
Tiger Brand RR Cable—Rubber-insulated neoprene sheath. A versatile cable for control and power applications. Both "conduit and duct" or "direct burial" (heavy jacket) types are available. Many constructions, including self-supporting aerial cable, can be furnished.



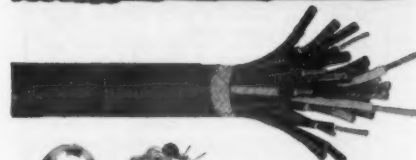
Tiger Brand Amerclad—The very highest quality in heavy-duty portable cords and cables. All jackets are vulcanized in a lead sheath, and are permanently marked with molded identifications. Over-all neoprene jackets show phenomenal resistance to abuse, sunlight, grease, oil or acid mine water.



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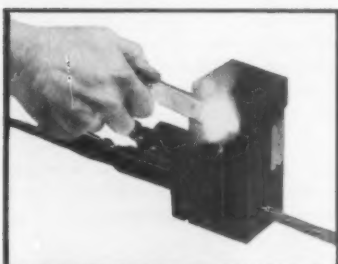
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F-334 SOLENOID
F-300 LINE

Stop waste due to excessive solenoid replacement. Call Trombetta for a replacement solenoid which will solve your problem.

Complete line of replacement solenoids ranging from short stroke to long stroke, and high speed solenoids for duty cycles up to 600 operations per minute:

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F-300 General Purposes: 14 sizes, 1 to 100 lbs. pull capacity
NA-700 National Acme replacement: all sizes and all modifications
AL-800 Long Stroke: 3 to 25 lb. pull range; 2" to 4.75" stroke range
AS-400 Heavy Duty: up to 400 strokes per minute continuously; 7 sizes; 0.5 to 14 lb. pull capacity
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G-200 General Electric replacement: 8 sizes
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RD-300 Solenoid operators (Reversing Solenoid)
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Shown recently at the NECA Convention, the GAT Booth was the highlight of the Show. GAT FASTENERS' appeal is universal, from the man concerned with actually doing the installation to the top designer in the construction or electrical department.

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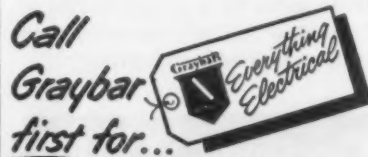
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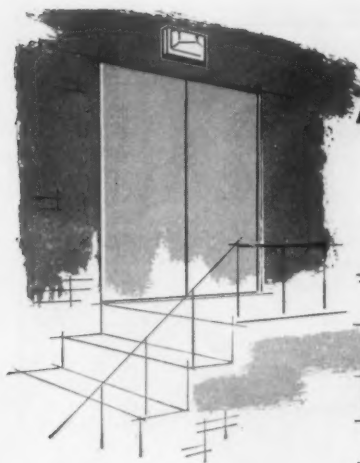
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*High Intensity Luminaire for Entryways,
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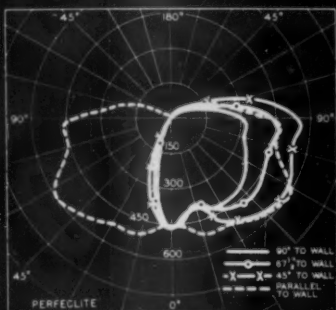
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In Controlled
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Another first from Perfectlite! A modular shaped lighting fixture that completely outmodes the usual exterior bracket extending on a heavy arm from the wall.

Ultra-modern in design, the new Pharos gives an asymmetric light pattern . . . provides high intensity illumination for wall areas . . . disperses a powerful outward distribution of light 90° from the wall as well. The heat-resistant glass refractor uses accurately calculated prisms on seven transmission surfaces . . . incorporates a silvered glass reflector at the top which directs the light downward.

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OUTLETS**

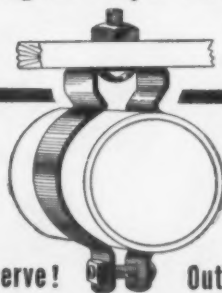


PATENTED SELF-CLOSING CAP positively prevents SHOCKS . . . BURNS . . . SHORT CIRCUITS! NO-SHOK automatically prevents insertion of hairpins, wires or other metal objects — protects children against tragic electrical accidents. Install NO-SHOK — an extra selling feature for safety-conscious home buyers!

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Hangers-Clips-Straps**



Outserve! Outlast!

Minerallac Cable, Conduit and Messenger Hangers are STEEL. Easier, quicker to install; permit speedy, compact wiring; economical. Also in Everdur . . . Porcelain Insulating Bushings available.

Jiffy STEEL Clips (Pipe-clamp) require only one screw, nail or bolt; rib-strengthened; for hanging pipe, conduit, BX cable, mounting coils, etc. Millions in use.

Steel Straps for Messenger-cable services on outlet boxes; may be used in conjunction with hangers.

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PLUGMOLD® Multi-Outlet Systems

Cover a wide range of electrical outlet requirements — for new construction or rewiring jobs. Mount on any surface . . . walls, work benches, counters, displays, etc. A minimum of fittings is required.

NO.1900



Furnished three ways: unwired (space outlets as desired); factory-wired sections (for short runs); and prewired Snapicoll (outlets on various centers).

NO.2000



One size raceway accepts three types of outlets—2-wire NEMA grounded and 2- and 3-wire duplex. Furnished either as pre-wired Snapicoll (outlets 30" or 60" on centers), or factory-wired sections with closer spaced outlets (for short runs).

NO.2100



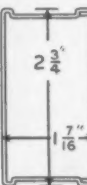
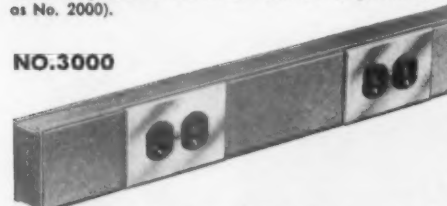
Furnished unwired (space outlets as desired). Receptacles available include 2-wire, 2- and 3-wire grounded, lumiline single, midjet twistlock, 3-wire polarized, 3-wire polarized grounded, and T-slot.

NO.2200



A combination multi-outlet system, wiring raceway and steel baseboard. Same receptacles as No. 2000. Furnished as pre-wired Snapicoll (same as No. 2000).

NO.3000

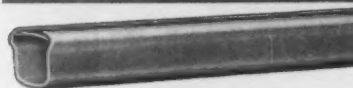


Any standard device designed for a single gang box can be installed wherever needed within the raceway. Standard flush plates are used.

CAPACITY (for wire types T, TW, RU)

PLUGMOLD		CONDUCTOR SIZE				
		NO. 6	NO. 8	NO. 10	NO. 12	NO. 14
NO. 1900	with devices	—	—	—	3	3
	no devices	—	—	—	3	3
NO. 2000	with devices	—	—	—	3	3
	no devices	—	—	—	3	3
NO. 2100	with devices: consult Wiremold Catalog No. 21	5	8	10	10	10
	no devices	—	—	—	—	—
NO. 2200	with devices	3	7	10	10	10
	no devices	5	8	10	10	10
NO. 3000	with devices	8	10	10	10	10
	no devices	10	10	10	10	10

WIREMOLD® Surface Wiring Raceways



Used along ceilings and walls — to modernize existing wiring, or complete new wiring from panel box to outlets. A minimum of fittings is needed. Four sizes; furnished as one-piece raceways.

NO.200



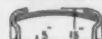
NO.500



NO.700



NO.1000



CAPACITY (for wire types T, TW, RU)

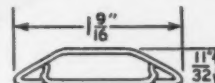
WIREMOLD	CONDUCTOR SIZE NO. 6	CONDUCTOR SIZE NO. 8	CONDUCTOR SIZE NO. 10	CONDUCTOR SIZE NO. 12	CONDUCTOR SIZE NO. 14
NO. 200	—	—	—	3	3
NO. 500	—	2	3	4	5
NO. 700	—	3	5	6	8
NO. 1000	5	8	8	10	10

PANCAKE® Overfloor Duct Systems

Strong, flat overfloor raceways to carry power and light and communications wiring to locations away from walls. Quickly installed without channeling into floors. A minimum of fittings is needed.



NO.1500



CAPACITY

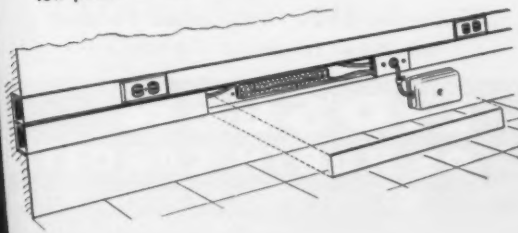
CONDUCTOR SIZE:	NO. 8	NO. 10	NO. 12	NO. 14
wire types T, TW, RU	4	4	6	8

NO.2600 (not shown)

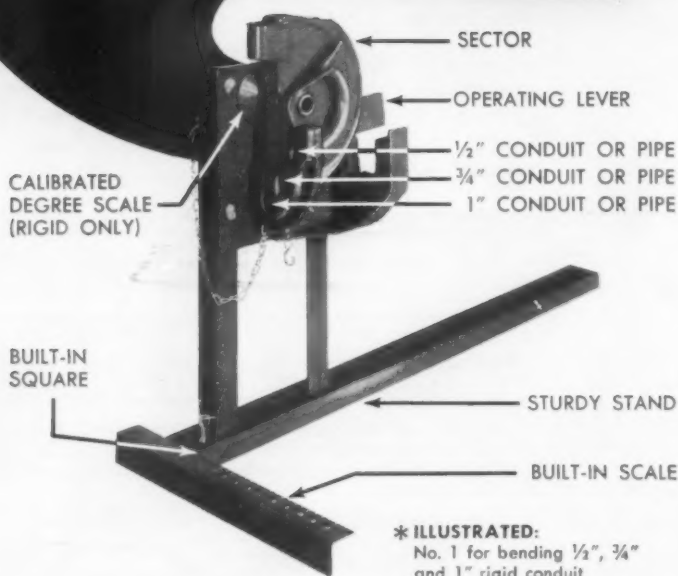
CAPACITY: two 26-pair telephone cables.

TELE-POWER Duct Systems

Consist of a pair of parallel Plugmold Raceways — one for telephone, signal and inter-office communications wiring; the other a multi-outlet system for power and light wiring. Because each raceway has a separate cover, the electrical contractor or telephone installer needs only install or remove the cover for the wiring that concerns him. The high and low potential wiring are not exposed to each other.



BEND CONDUIT EASILY and ACCURATELY with a real on-the-job tool!



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These are complete machines of all steel construction and their light weight (66 lbs. including stand) make them a real on-the-job tool. There are no loose parts to be misplaced or lost and the only maintenance is an occasional drop of oil. You get accurate bends every time... no strain, slipping or loose parts to worry about. Benders work equally well on aluminum or steel conduit. Ask the electrician who is using one; he will tell you it's the finest tool available and at a price that is eminently reasonable.

BENDING CIRCLES: INSIDE RADIUS

	No. 1	No. 1T
1/2" conduit or pipe	2"	EMT 3"
3/4" conduit or pipe	4 1/4"	EMT 4 1/2"
1" conduit or pipe	5 3/4"	EMT 6 1/2"
	No. 2	No. 2T
1 1/4" conduit or pipe	7 1/4"	EMT 9 1/2"
1 1/2" conduit or pipe	8 3/4"	EMT 10 1/2"

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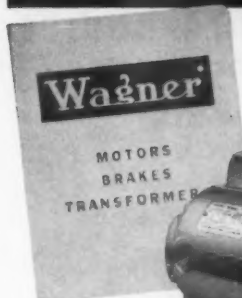
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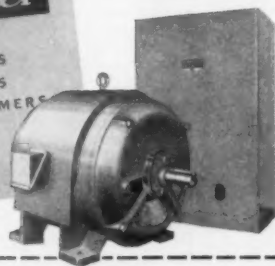
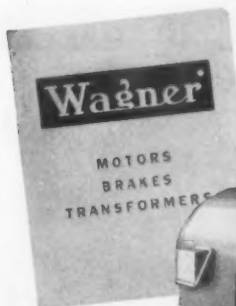
Bulletin MU-211. Illustrates and describes both single-phase and polyphase squirrel-cage motors, open and enclosed types; also fan and blower motors and jet pump motors.



Wagner

INTEGRAL HP MOTORS

Bulletins MU-212, 213. Cover single-phase ratings through 15 hp, and polyphase squirrel-cage motors through 1000 hp, open and enclosed types; also multispeed, punch press, crane and hoist, and wound rotor polyphase motors.



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WMSB-15

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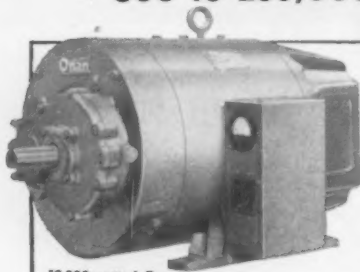
CITY & STATE _____



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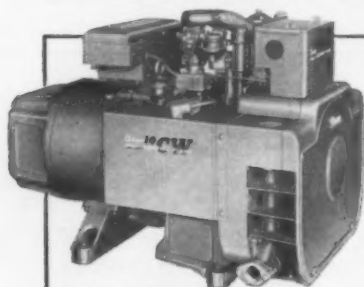
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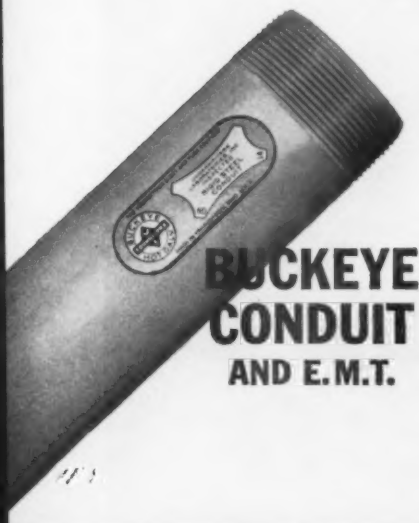


Youngstown

rigid steel conduit and E.M.T.

Youngstown conduit consistently lowers installation costs because (1) it bends easily; (2) it threads easily; (3) it's easy to fish wires through. This high quality is built into Buckeye and Yoloy Conduits by using only the finest grades of steel coupled with the most

modern coating techniques. This consistent top quality is closely watched from the iron ore to the finished product by one integrated steel organization, The Youngstown Sheet and Tube Company, Youngstown, Ohio. Carbon, Alloy and Yoloy Steel.



**BUCKEYE
CONDUIT
AND E.M.T.**

Hot Dipped Galvanized inside and out, including threads, plus a coating of tough, clear enamel after threading gives you *double* corrosion protection plus easy wire pulling.

Electro-Galvanized after threading with a smooth, uniform outside coating of zinc. Inside and outside are coated with tough, elastic, clear enamel, baked on, for protection and easy fishing.

Black Enameled inside and out, baked on for a tight, elastic, high-lustre finish to guard against cracking during bending and handling.

Electric Metallic Tubing. Brightly electro-galvanized with a clear elastic enamel coating baked on the inside and outside. A mirror-smooth raceway for very easy wire pulling.



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CONDUIT
AND E.M.T.**

Yoloy is unsurpassed for tough jobs where highest corrosion-resistance is needed. For example: underground installations or where conduit is exposed to salt, most chemical and corrosive industrial atmospheres.

Yoloy is a 2% nickel, 1% copper alloy steel designed especially for high corrosion-resistance, increased strength and good bending qualities. Actual tests prove coatings also last longer due to their superior adherence to Yoloy Steel.

Yoloy Conduit and fittings are available in:

**Hot Dipped Galvanized
Black Enameled**

Yoloy E.M.T. combines all the advantages of Buckeye E.M.T. with the high corrosion-resistance, ductility and higher strength of Yoloy Steel.

Specify Yoloy for your tough jobs.

Approved by Underwriters' Laboratories, Inc. and meets Federal Specifications

CONDUIT

Size	Nominal Diameter (inches)		Nominal Wall Thickness (inches)	Threads Per Inch	Feet Per Bundle
	Internal	External			
1/2	.622	.848	.109	14	100
3/4	.824	1.050	.113	14	90
1	1.048	1.315	.133	11 1/2	50
1 1/4	1.380	1.660	.140	11 1/2	30
1 1/2	1.610	1.900	.145	11 1/2	30
2	2.067	2.375	.154	11 1/2	
2 1/2	2.460	2.875	.203	8	
3	3.068	3.500	.218	8	
3 1/2	3.548	4.000	.228	8	
4	4.026	4.500	.237	8	
5	5.047	5.563	.258	8	
6	6.065	6.625	.280	8	

Conduit furnished in 10-foot lengths, threaded both ends with one coupling.

COUPLINGS

Size	Outside Diameter (inches)	Length (inches)	Pieces Per Carton
1/2	1.063	1.562	100
3/4	1.313	1.625	90
1	1.578	2.000	50
1 1/4	1.900	2.062	50
1 1/2	2.200	2.082	50
2	2.750	2.125	25
2 1/2	3.250	3.125	
3	4.000	3.250	
3 1/2	4.625	3.375	
4	5.000	3.500	
5	6.250	3.750	
6	7.390	4.000	

ELBOWS

Size	Radius (inches)	Offset (inches)	Pieces Per Carton
1/2	4.000	6.500	50
3/4	4.500	7.250	50
1	5.750	8.750	25
1 1/4	7.250	10.500	20
1 1/2	8.250	11.750	15
2	9.500	13.500	10
2 1/2	10.500	15.000	
3	13.000	18.000	
3 1/2	15.000	20.500	
4	16.000	22.000	
5	24.000	31.000	
6	30.000	37.500	

ELECTRICAL METALLIC TUBING

Size	Nominal Diameter (inches)		Nominal Wall Thickness (inches)	Feet Per Bundle
	Internal	External		
1/2	.622	.708	.042	100
3/4	.824	.922	.049	100
1	1.048	1.163	.057	100
1 1/4	1.380	1.510	.065	50
1 1/2	1.610	1.740	.065	50
2	2.067	2.197	.065	30

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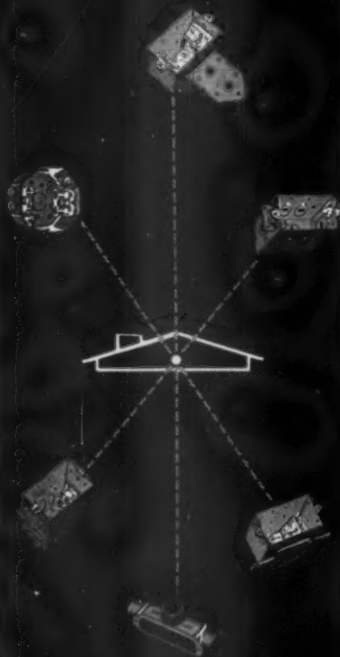
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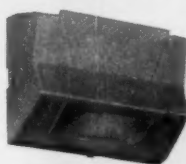


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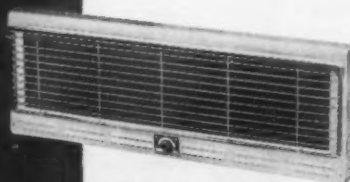
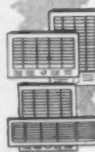
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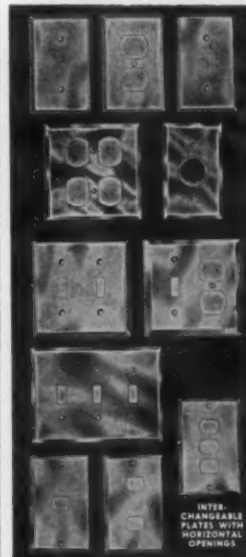
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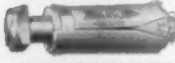
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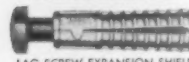
O-E EXPANSION SHIELD



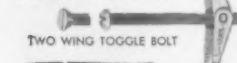
HOLD-IT EXPANSION SHIELD



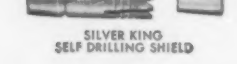
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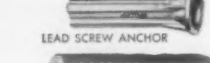
MAL-LEAD BOLT ANCHOR



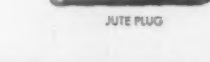
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SPIRAL-DRIVE NAIL ANCHOR



LEAD SCREW ANCHOR



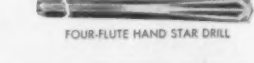
JUTE PLUG



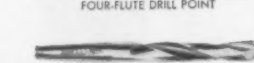
ARRO-CORE MASONRY DRILL



ARRO-FLUTE CARBIDE MASONRY DRILL



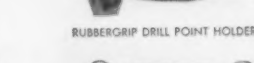
FOUR-FLUTE HAND STAR DRILL



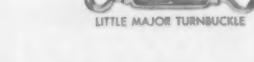
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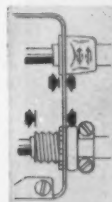
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*Catalog No. 1050—An exclusive Buchanan development (Patent 2527227).

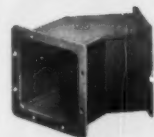
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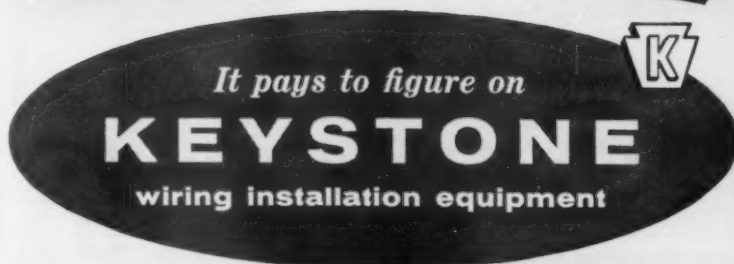
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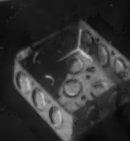
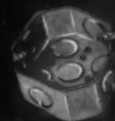
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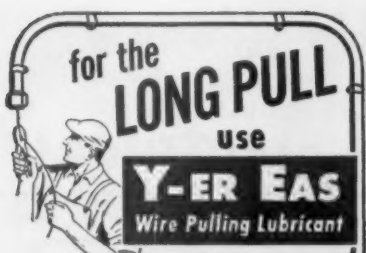


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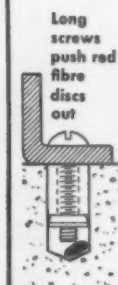
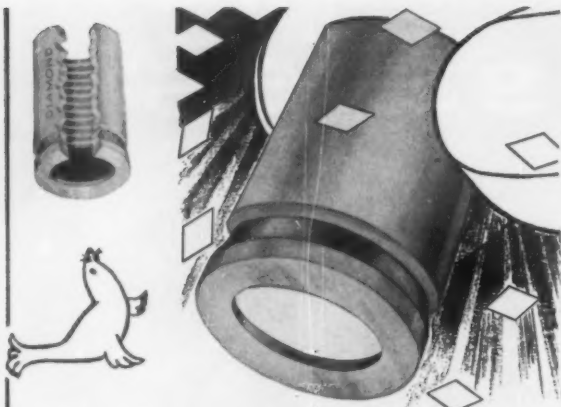
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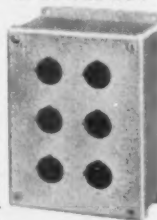


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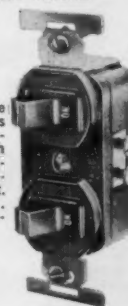
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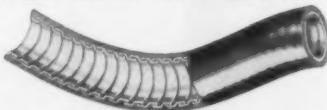
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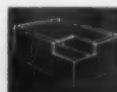
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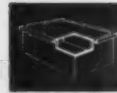
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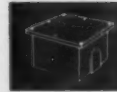
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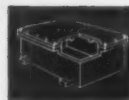
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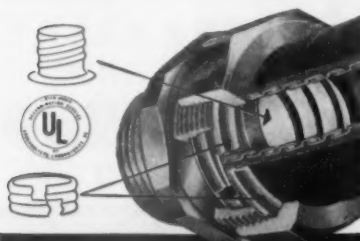


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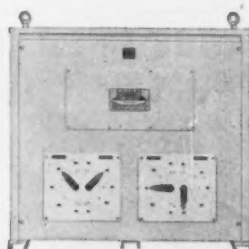
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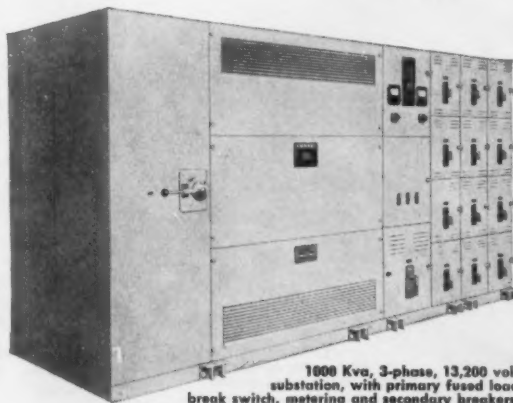


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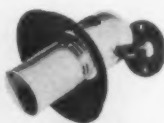
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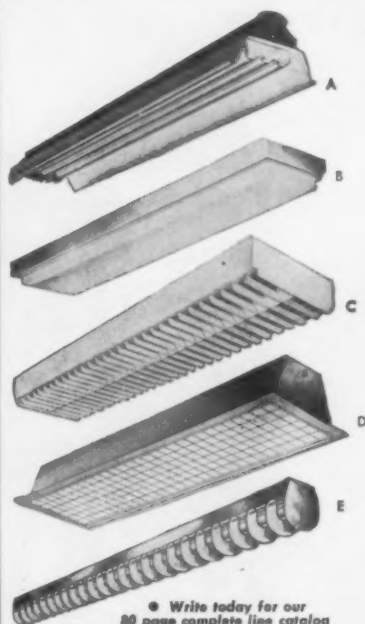
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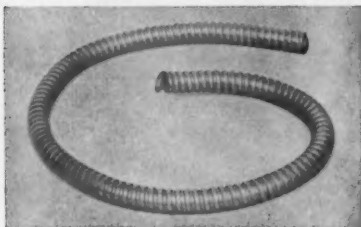
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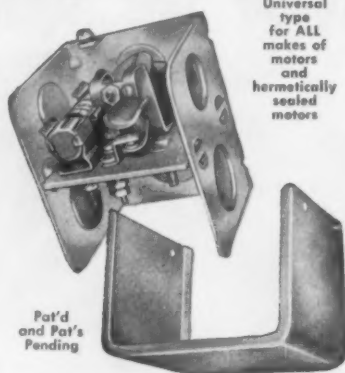


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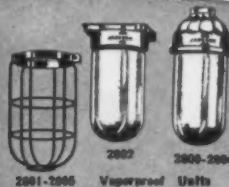
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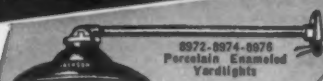
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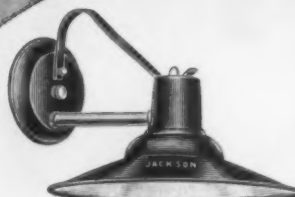


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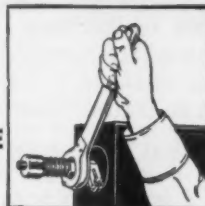


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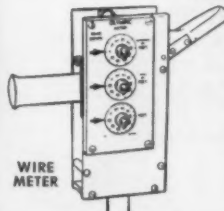


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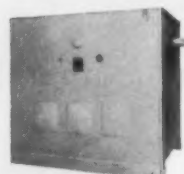
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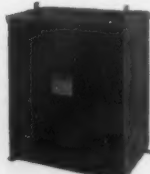
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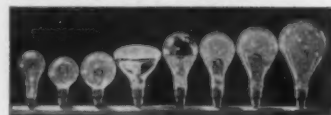


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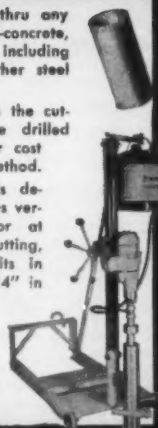
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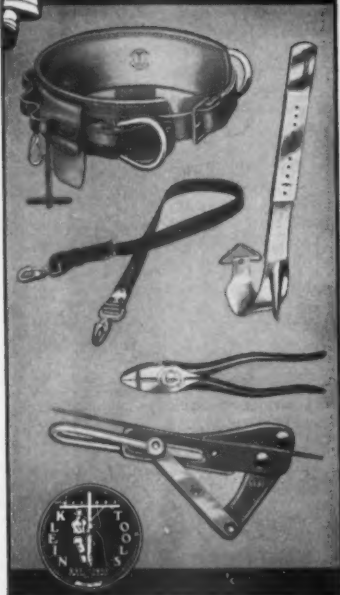
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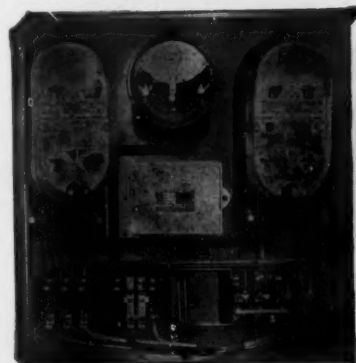
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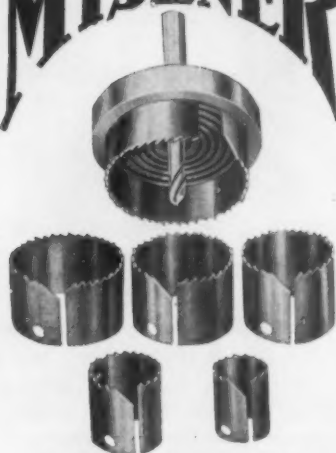
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PANELBOARDS, CIRCUIT BREAKERS
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The VADSWORTH Electric
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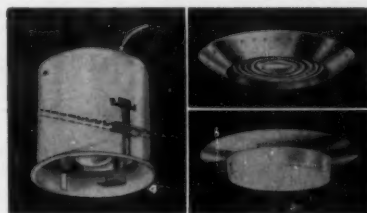
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Meet the ever-growing demand for larger service entrance requirements — use entrance cable with M&W ENTRANCE FITTINGS. These include: Entrance Heads, Straps, Watertight Connectors, Non-watertight Connectors and Sill Plates. Available are a complete line of fittings for cable sizes 3 No. 3 to 3 No. 4/0 using 1", 1 1/4", 1 1/2" or 2" hubs.

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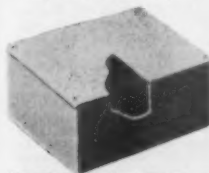
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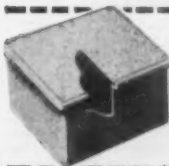
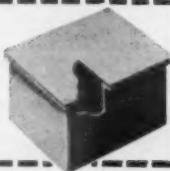


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Surface mounted, 156 standard sizes plus others

WATERTIGHT AND SUBMERSIBLE

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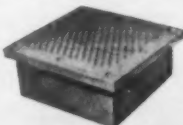
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TYPE ER**

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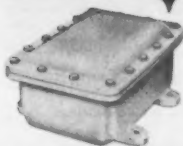
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RATINGS:

Single-Phase
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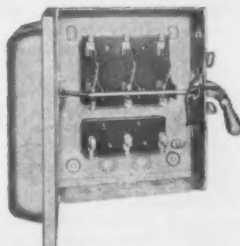
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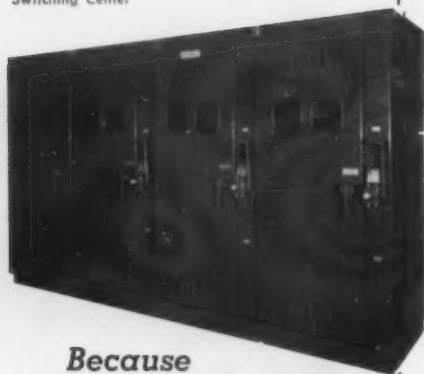
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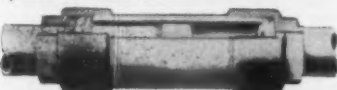
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TYPE AF for rigid conduit. Allows 4" expansion and contraction.



TYPE EF for rigid conduit. Allows 8", 12" or more expansion and contraction.



TYPE TF for thin wall (EMT) conduit. Allows 4" expansion and contraction.

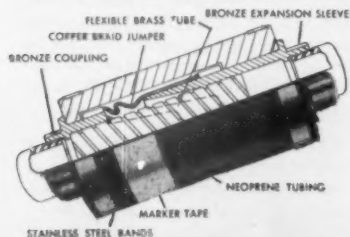


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¾" movement in all directions.

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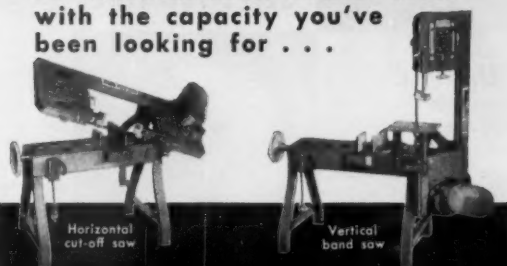
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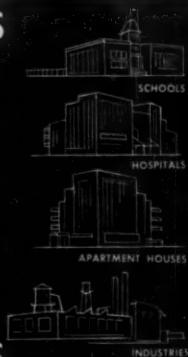
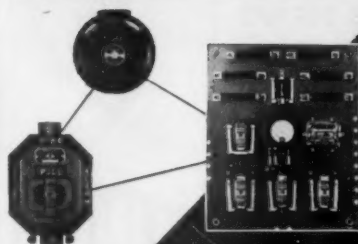


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coded and non-code types

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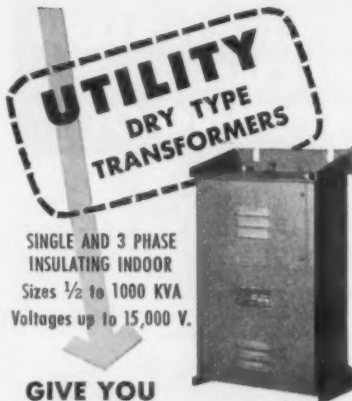
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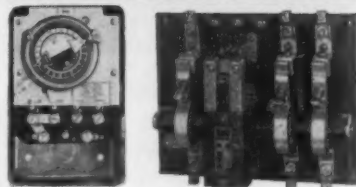
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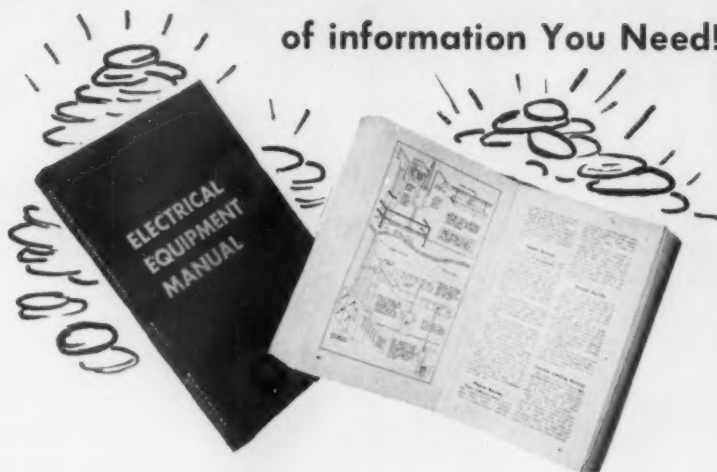
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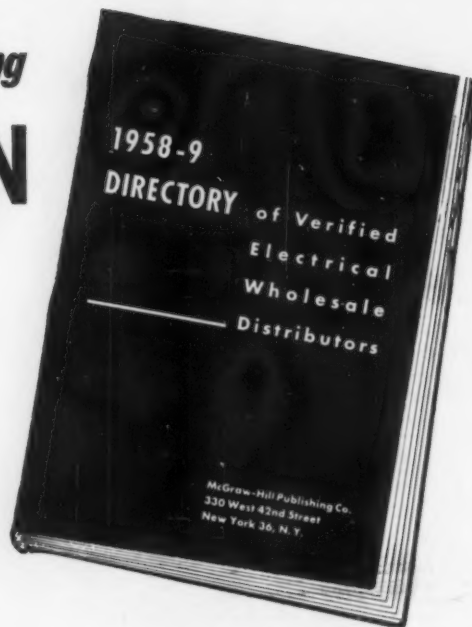
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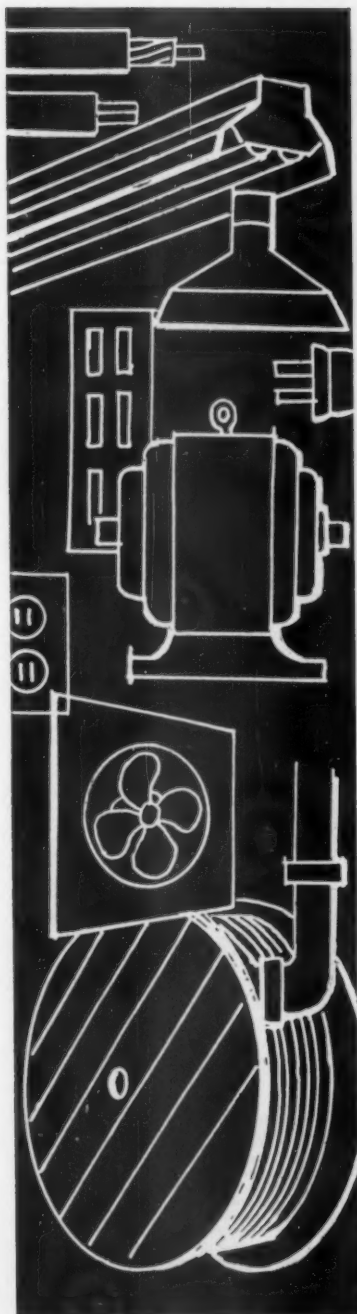
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PRODUCT DIRECTORY

Classified listings of manufacturers of electrical products



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- | | |
|--------------------------------------|--|
| 1. Power Transmission Line Equipment | 7. Raceway |
| 2. Transformation & Conversion Eqpt. | 8. Motors & Generators |
| 3. Switching & Control Equipment | 9. Lighting Equipment |
| 4. Protective Equipment | 10. Signal, Communication & Indicating Eqpt. |
| 5. Wiring Devices & Boxes | 11. Heating & Cooling Equipment |
| 6. Conductors & Connectors | 12. Tools & Supplies |

Each of these sections is further broken down into individual classes of equipment. For example: Section 1, "Power Transmission Line Equipment", includes (A) CONDUCTOR SUPPORTING STRUCTURES, (B) LINE TRUCKS & MOBILE EQUIPMENT, (C) MANHOLE EQUIPMENT, and (D) POLE EQUIPMENT.

Where applicable, these classes are further subdivided. CONDUCTOR SUPPORTING STRUCTURES, for instance, include (1) Crossarms, (2) Poles, and (3) Towers. Companies manufacturing crossarms would be followed by a (1) in parentheses; those manufacturing poles would be followed by a (2); those manufacturing both would be followed by (1-2), etc.

The symbol (●) indicates that detailed information concerning the product may be found on the page indicated after the listing.

Technical Literature

Manuals, bulletins and other reference material on electrical products are listed following each of the twelve product classifications of the Product Directory. They may be obtained without cost or obligation by filling in the requested information on one of the Free Information cards on page 208.

PRODUCT INDEX

Manufacturers of equipment and materials normally used in electrical construction, plant operations and motor service work are listed in the Product Directory beginning on page 176. To find any specific product in this directory, locate the product first in the comprehensive alphabetical index below.

For example, this index shows "Cartridge fuses" to be listed under 4B. Using the handy edge index on the front cover, turn to Section 4 and find "Cartridge fuses" as number 1 under "4B. Fuses". Companies listed under "Fuses" which are followed by the bracketed number (1) make cartridge fuses.

A

Adapter removers, fuse.....4C
Adapters, conduit bushing.....7E
Adapters, grounding.....5B
Adapters, socket.....12F
Adjustable floors.....7C
Agitator-drive motors.....8D
Air conditioners.....11E
Air gap gauges.....12E
Air handling equipment.....12F
Aircraft motors.....8D
Airport cable.....6D
Airport lighting.....9D
Alarms.....10B, D, E
Alarms, burglar.....10D
Alarms, fire.....10E
Alarms, intrusion.....10D
Alloy conduit.....7D
Alternators.....8C
Aluminum conduit.....7D
Aluminum EMT.....7F
Ammeters.....10A
Amplifiers, magnetic.....3K
Analyzers, circuit.....10C
Analyzer, protective device.....10C
Anchors, earth.....1D
Anchors, pole line.....1D
Annunciator.....12K
Annunciator units.....6D
Annunciators.....10B
Antenna outlets.....5B
Antenna systems.....10F
Appliance cord sets.....6E
Appliance switches.....6D
Appliance wire & cable.....6D
Arbor presses.....12J
Arc lamp transformers.....2B
Arc lamps.....9F
Arc lighting equipment.....9C
Argon lamps.....9G
Armature balancers.....12E
Armature banders.....12E
Armature banding.....12F
Armature fields.....12P
Armature holders & stands.....12E
Armatures.....12P
Arresters, lightning.....4E
Asbestos-cement conduit.....1D
Asbestos insulation.....12Q
Asbestos tape.....12S
Asbestos tubing.....12T
Assemblies, building.....5B
Attachment caps & bases.....3B
Automatic transfer switches.....3G
Automotive motors.....8D
Autostarters.....3M
Autotransformer starters.....3M
Autotransformers.....2A, 2B
Auxiliary gutters.....7A

B

Bags, tool.....12A
Balancer sets.....8F
Balancers, motor.....12E
Ball bearings.....12P
Ballast thermal protectors.....4E
Ballasts, lamp.....5C
Banders, armature.....12E
Banding, armature.....12V
Banding twine.....12V
Barn wire.....6D
Bars, commutator.....12P
Bars, lamping.....12A
Baseboard electric heaters.....11A
Bases, attachment.....5B
Bases, fuse cutout.....4C
Bases, motor & generator.....12P
Batteries.....2B
Battery accessories.....2G
Battery chargers.....2F
Battery-operated fluorescent fixtures.....9C
Battery switches.....3J
Bayonet sockets.....5C
Beacons.....9D
Beads, insulating.....12U
Beam clamps.....6G
Bearing installers & extruders.....12J
Bearings, motor & generator.....12P
Bed lamps.....9A
Beeswax.....12V
Bells.....10G

Bench lights.....9E
Benders, conduit & EMT.....12C
Benders, metal.....12J
Benders, strand & cable.....12B
Bending gauges.....12C
Bending machine pumps.....12C
Bin level indicators.....12B
Binding posts.....6F
Bins, parts storage.....12D
Bins, truck.....12D
Bipost sockets.....5C
Blanks, knockout.....5E
Blocks, cable-pulling.....12B
Blocks, connecting.....6F
Blocks, fuse.....4C
Blocks, terminal.....1F
Blowers.....12J
Blowers, portable.....10B
Blown fuse alarms.....10B
Bodies, conduit.....7E
Bodies, cord connection.....5B
Bodies, truck.....1B, 12D
Boilers, steam (electric).....11C
Bolt-sealing compound.....12K
Bolts, expansion.....12K
Bolts, toggle.....12K
Borers, earth.....1B
Boring tools, hand.....12J
Boundary alarms.....10D
Box hardware.....8E
Box-to-conduit connectors.....7E
Boxes, junction-pole base.....5D
Boxes, terminal-motor & generator.....12P
Boxes, wiring.....5D
Braces, trench.....1C
Brackets, transformer mounting.....9A
Brackets, wall lighting.....8D
Brake motors.....3K
Brakes, electric.....3K
Brazing transformers.....10C
Breakers, circuit.....4D
Brewery cable.....6D
Bridge cable.....6D
Bridge lamps.....9A
Bridges, measurement.....10C
Bridle rings.....6G
Brush holders.....12P
Brush plating equipment.....12J
Brush seats.....12E
Brushes, motor & generator.....12P
Buckets, tool.....12A
Building wire & cable.....6A
Bulbs, lamp.....9G
Burglar alarms.....10D
Burnishers, contact.....12L
Bus drop cable.....6D
Busbar & supports.....6H
Bushing adapters.....7E
Bushings, conductor supporting.....6G
Bushings, conduit.....7E
Bushings, motor.....12P
Bushings, sealing.....7E
Bushings, strain relief.....6G
Bushings, transformer.....2A
Busway.....7B
Buzzers.....10G

C

Cabinets, equipment enclosing.....5F
Cabinets, parts storage.....12D
Cable.....6A to 6E
Cable benders.....12B
Cable connectors.....5E, 6F
Cable drive-rings.....6G
Cable duct shields.....1C
Cable electric heating.....1C, 6G
Cable hangers.....12P
Cable locators.....10C
Cable pay-out reels & turntables.....12A
Cable racks, hangers, arms, hooks and extensions (manhole).....1C
Cable sealing compound.....12V
Cable spacers.....6G
Cable splices & splicing equipment.....6F
Cable tags.....12V
Cable ties.....6G
Cable-to-box connectors.....5E
Cable-to-cable connectors.....6F
Cable trays.....6G
Cable, wire & cord.....6A, B, C, D, E
Cable & wire supports.....1C, 6G
Cable & wire tools.....12B
Cable wrapping.....12U

Calling systems.....10F
Cable insulation.....12S
Canopy switches.....6A
Canvases, varnished.....12U
Capacitor protective gaps.....4E
Capacitors, fluorescent lamp circuit.....5C
Capacitors, motor drive.....12P
Capacitors, power-factor correcting.....3P
Caps, attachment.....5B
Caps, service entrance.....7E
Carbon brushes.....12E
Carrier system.....3K
Cartridge fuses.....4B
Cartridge heaters.....11C
Carts, reel.....12B
Cathodic protection.....1D
Cathodic protection equipment.....4E
Ceiling heating cable & panels.....11A
Cellophane tape.....12R
Channel, cable-supporting.....12V
Cellulose acetate tape.....12S
Cement, commutator.....12V
Cement, insulating.....12U
Central furnaces, electric.....11A
Central industrial control systems.....3H
Centrifugal switches.....6B
Chain, lighting fixture.....12L
Changers, lamp.....12L
Changers, transformer tap.....2A
Chain, cable-supporting.....12V
Chargers, battery.....2F
Charging controls, battery.....3J
Charge neutralizers & eliminators.....12N
Choke, coil.....12M
Chemical.....12V
Chimes, tool.....12D
Chimes.....10G
Church lighting.....9C
Circle cutters.....10C
Circuit analyzers.....10C
Circuit breaker cabinets.....5F
Circuit breaker testers.....10A
Circuit breakers.....4D
Circuit testers.....10A
Circulating fans.....11F
Clamps, beam.....6G
Clamps, conduit.....7E
Clamps, fuse clip.....4C
Clamps, ground.....12V
Clamps, wire & cable.....6G
Clay conduit.....7D
Clay duct dowel pins.....1C
Cleaner, fuse clip.....12J
Cleaners, vacuum.....12J
Cleaning compound.....12V
Cleats, wire & cable.....6G
Climbing equipment.....12A
Clip clamps & reducers, fuse.....4C
Clip cleaner, fuse.....4G
Clips, cable-supporting.....6G
Clips, fuse.....4C
Clips, test.....12L
Clock systems.....11A
Closed circuit television.....10F
Cloth, duck.....12U
Clothing, protective.....12A, 12V
Clutches, electric.....8K
Coil testers.....10G
Coil tools & equipment.....12F
Coiled cords.....6E
Coils, motor & generator.....12P
Coils, solenoid & magnet.....12V
Cold cathode lamps.....9F
Cold cathode lighting fixtures.....9C
Collecting rings & shoes.....6F
Colored lamps.....9G
Commercial lighting.....6D
Communication cable.....6D
Communication systems.....10P
Commutator bars.....12P
Commutator cement.....12V
Commutators.....12P
Compensators, motor.....3M
Compound, bolt-sealing.....12K
Compound, cable sealing.....12V
Compound, cleaning.....12V
Compound, conduit sealing.....6F
Compound, fireproofing.....12V
Compound, heat-conducting.....12V
Compound, impregnating.....12V
Compound, insulating.....12U
Compound melting pots.....12J
Compound, screw-anchoring.....12K
Compound, splicing.....12V
Compound, wire-pulling.....12V

Compound, wire-stripping	12V
Concrete	5D
Concrete floor raceway systems	7C
Concrete inserts	12K
Conditioners, air	11E
Conductor rails	6J
Conductor supporting structures (out- door)	1A
Conductor supports	6G
Conductor systems, enclosed (trolley)	7J
Conduits	6A, B, C, D, E
Conduit fittings & bodies	7D
Conduit, flexible metallic	7G
Conduit pushing pumps	12C
Conduit racks	12C
Conduit, thinwall	7F
Conduit tools	12C
Connecting blocks	6F
Connection bodies, cord	5G
Connector tools, cable	12B
Connectors	6E
Connectors, cable-to-cable	6F
Connectors, conduit-to-box	7E
Connectors, ground	6F
Contact burners	12J
Contactors, magnetic	3M
Contacts, controller	12V
Continuity testers	10C
Control cable	6D
Control centers, motor	12V
Control panels	12V
Control switchboards	3C
Control transformers	2B
Controller contacts	12V
Controllers, drum	3M
Controllers, electric fence	3J
Controllers, motor	3M
Controls, heating	3J
Controls, motor	3J
Controls, welding	3J
Convenience outlets	5B
Converters	2D
Copper oxide rectifiers	3C
Cord connection devices	6C
Cord, flexible	6E
Cord sets	6E
Cord switches	3H
Corrosion preventives	12V
Cotton sleeving	12T
Cotton tape	12S
Couplings, conduit	7E
Counters, revolution	10B
Coupling devices	10B
Cover hooks, manhole	1C
Covers, box	5E
Covers, manhole	1C
Crane controls	3J
Crane motors	3D
Crimp paper tape	12S
Crossarm hardware	1D
Crossarms	1A
Current-failure alarms	10B
Current-limiting busway	7B
Current-limiting fuses	4B
Current-limiting reactors	4E
Current-limiting resistors	3P
Current-limiting transformers	2B
Cutout cabinets	3P
Cutout-operating mechanisms	3J
Cutouts, high-voltage fuse	4A
Cutouts & holders, low-voltage fuse	4C
Cutouts, thermal	4B
Cutters, circle	12M
Cutters, commutator	12E
Cutters, conduit & EMT	12C
Cutters, insulation	12G
Cutters, metal	12M
Cutters, wire & cable	12B

D

Dating nails, pole	1D
Dead-ends	1D
Dead-front switches	3G
Decals	12N
Decorative lamp bulbs	10C
Dehumidifiers	10G
Delayed-action switches	5A
Demagnetizers	12J
Demand meters	10A
Desk lamps	9A
Detectors, fire alarm	10B
Detectors, ground	10A
Detectors, metal & outlet	10C
Dielectric heaters	11C
Dies, conduit threading	12C
Diesel generators	8F
Diggers, pole-hole	12A
Dimmers, lamp	3J
Dinkies, pole	1B
Discharge lamps	9F
Disconnect sticks	12A
Disconnect-type hangers	5G
Disconnect switches	3M
Display lights	9C
Display turntables	12N
Disposal units, lamp	12J
Distribution panels	3D
Ditchers	1B
Doctors' receptacles	10B
Door & gate openers	3J
Door switches	5A
Door mat switches	3H
Dowel pins, clay duct	1C
Drilling tools	12M
Drip-proof motors	8C
Drive-rings, cable	6G
Drivers, wedge	12G
Drives, power	12C
Drives, variable speed	3J
Driveway lights	9A
Drum switches & controllers	3M
Dry cells	2E

Dryer cords	6E
Dryer receptacles	6B
Duck cloth	12U
Duct heaters, electric	11A
Duct pins	1C
Duct shields	1C
Duct, trolley	7B
Duct, underfloor	7E
Duct, wiring	1D
Dummy fuse plugs	4C
Dust-tight lighting fixtures	9C
Dynamic balancers	12E
Dynamometers	10C
Dynamos	8G
Dynamotors	8G

E

EMT	7F
Earth boring trucks	1E
Ebony	12U
Edgers, insulation	12Q
Electric time indicators	1E
Elbow, conduit	7E
Electric brakes	12L
Electric drills	12M
Electric fence controllers	9C
Electric furnace cable	6D
Electric furnaces	11C
Electric heating equipment	11A, B, C
Electric locks	1E
Electric metallic tubing	7F
Electric ovens	11C
Electric plants	8F
Electric process heaters	11C
Electric saws	11C
Electric space heaters	11A
Electric steam boilers	11C
Electrical tape	12R
Electroluminescent panels	9J
Electrolysis meters	10A
Electromagnets	3K
Electroplating controls	3J
Electroplating devices	12J
Electrostatic meters	10A
Elements, heating	11C
Elevator cable	6D
Elevator motors	8D
Eliminators, static	12N
Emergency generators	8F
Emergency lighting equipment	9C, 9E, 9F
Enclosures, metal	1D
End seals, cable	6F
Ends, dead	1D
Engine-powered generators	8F
Engravers	12J
Enlargers, conduit	7E
Entrance heads & hardware	7E
Environment-resistant connectors	6J
Equipment switches	12X
Estimating service	12J
Etchers	12J
Exciters	11F
Exhaust fans	11F
Exit lights	12K
Expansion bolts, shields & anchors	12K
Expansion fittings, conduit	7E
Experimental switchboards	3C
Explosion-proof boxes	6D
Explosion-proof breakers	4D
Explosion-proof lighting	9C
Explosion-proof motors	8C
Explosion-proof panelboards	8D
Explosion-proof plugs & receptacles	5B
Explosion-proof switches	6E
Extension cords	6E
Extension cords with lamps	9E
Extractors, gear & bearing	12T
Eye shields	12W

F

Face shields	12W
Fan motors	8D
Fans	11F
Fans & lighting fixtures combined	11F
Fasteners & fastening devices	12K
Fault indicators	10B
Fault locators	10C
Fence alarms	10D
Fence controllers	3J
Fiber conduit	7D
Fiber & fiberboard insulation	12Q
Fiber-glass tape	12S
Fiber sleeving & tubing	12T
Field discharge switches	3K
Fields, stator & armature	12P
Filament lamps	9G
Files, slot	12T
Fire alarm detectors	10B
Fire alarms	10E
Fireproofing compound	12V
Fish paper	12Q
Fish tape or wire	12R
Fittings, conduit	7E
Fittings, expansion	7E
Fittings, service entrance	7E
Fittings, weatherproof	5B
Fixture hangers & supports	3H
Fixture supports & raceway, combined	3H
Fixture wire	6B, D
Fixtures, lighting	9A to 9E
Flame safeguard equipment	3K
Flashers & controls	3H
Flexible cord	6C
Flexible metallic conduit	7G
Flexible shafts	12P
Flexible sleeving	12T
Float switches	11H
Floodlights	9D
Floodlights, garden	9A

Floor boxes	5D
Floor furnaces	11A
Floor heating cable	11A
Floor lamps	9A
Floor mats, heated	9A
Floor outlet nozzles	5E
Floor raceway systems	7C, 7K
Floors, adjustable	3H
Flow switches	3H
Fluorescent lamp changers	12L
Fluorescent lamp disposal units	12J
Fluorescent lamps	9F
Fluorescent unit testers	10C
Floor, soldering & welding	10C
Fluxmeters	10A
Folders, insulation	12G
Foot switches	3H
Footmat switches	3H
Forced-air heaters, electric	11A
Formers, insulation	12G
Forms, coil	12F
Fractional-horsepower motors	8A
Frames, manhole	1C
Frames, motor & generator	12P
Framing angle	12D
Framing, cable-supporting	6G
Framing, metal	3D
Frequency changers	8D
Frequency controls	3K
Frequency meters	10A
Friction tape	12R
Fullerboard	12D
Furnace cable	6D
Furnace control transformers	2B
Furnaces, electric space heating	11A
Furnaces, industrial electric	11C
Furnaces, accessories	11C
Fuse adapter removers	4C
Fuse alarms & indicators	10B
Fuse cabinets	6F
Fuse clip cleaner	4C
Fuse cutouts, bins & holders	4A
Fuse cutouts, high voltage	4A
Fuse pullers	12L
Fused quartz	12U
Fused taps & plugs	5B
Fuses	4B

G

Gages, wire	12B
Gage meters	10A
Gap gages	12E
Garden lights	9A
Gas tube sign cable	6D
Gas-turbine generators	8F
Gas-vacuum-discharge lamps	9F
Gaskets, conduit fitting	7E
Gasoline-engine-driven generating sets	8F
Gate & door openers	3J
Gauges, air gap	12E
Gear installers & extruders	8D
Gearmotors	8D
Generating sets	8F
Generator controls	3J
Generator replacement parts	12P
Generators	8G
Germanium rectifiers	2C
Gins, transformer	12A
Glass fiber insulation	12Q
Glass fiber tape	12S
Glass tube fuses	9H
Glassware, lighting	9H
Glow lamps	9F
Glue pots	12J
Goggles	10G
Gongs	10G
Gooseheads	7E
Grapples, conduit tool	12C
Grinders, commutator	12E
Grips, cable-pulling	12B
Grips, cable-supporting	6G
Grips, fish tape	12B
Ground clamps	6F
Ground detectors	10B
Ground resistance testers	10C
Ground rods	4E
Ground wire	6D
Ground wire molding	7H
Grounding adapters, cord-connecting	5B
Grounding equipment, pole line	1D
Grounding transformers	2B
Growlers	10C
Guard rails, manhole	1C
Guard, conduit thread	7E
Guards, lamp	5C
Guides, cable & wire pull-in	12B
Guns, soldering	12H
Guns, staple	12B
Guns, wire installation	12B
Gutters, auxiliary	7A
Guys—pole line	1D

H

Hammer-actuated tool fasteners	12K
Hammers, electrician's	12L
Hand tools	12L
Hand trucks	12D
Hangers, box	5E
Hangers, cable	1C, 6G
Hangers, conduit	7E
Hangers, lighting fixture	5B
Hangers, manhole cable	1C
Hardware, box	5C
Hardware, pole & crossarm	1D
Heads, coil	12F
Heat service entrance	7E
Heat-conducting compounds	12V
Heat pumps	11B

Heated floor mats	11A
Heater wire & cable	6D
Heaters, electric space	11A
Heaters & lighting fixtures, combined	11A
Heaters, soldering gun or iron	12H
Heating cable	11A, C
Heating controls & devices	11C
Heating elements & devices	11C
Heating transformers	2E
Heavy-duty switches	3H
Hermatic motors	8C
Hickey, box	11F
Hickey, conduit & EMT	12C
High-frequency generators	3E
High-frequency motors	3B
Highway lighting	9D
Holst motors	12D
Holsting equipment, pole line	12A
Holts	12D
Holders, armature	12E
Holders, brush	12F
Holders, fuse	4C
Holders, lamp	6C
Holders, soldering gun & tool	12H
Holders, tool	12A, 12L
Hole saws	12M
Hoods, range	11F
Hooks, lacing	12F
Hooks, manhole cover	1C
Horns	10G
Hospital signs	10F
House numbers, illuminated	9D
Housings & cabinets	6F
Hot line tools	12A
Humidifiers	11G

I

Identification nameplates	12J
Ignition transformers	2B
Illuminated house numbers	9A
Immersion heaters	11C
Impregnating compound	12V
Impregnators, coil	12C
In-and-out registers	10F
Incandescent lamp changers	12L
Incandescent lamps	9C
Indicators, conduit fitting	12C
Indicating & pilot lights	9C
Indicators	10B
Induction heaters	11C
Induction motors	8B
Industrial control systems	8K
Industrial lift trucks	8K
Industrial lighting	9C
Industrial television	10F
Infrared heaters	11C
Infrared lamps	9C
Insect-repellent lamps	9G
Inserts, concrete	12K
Inspection lights	9E
Installers, gear & bearing	12J
Institutional lighting	9C
Instrument motors	8D
Instrument transformers	2B
Instruments, indicating	10A
Insulating cement	12U
Insulating compounds	12U
Insulating materials	12U
Insulating paint	12U
Insulation products, porcelain	12U
Insulation testers	12C
Insulation	12C
Insulators, interior wiring	8C
Insulators, pole line	11D
Intercom systems	10F
Interlocks	3K
Interval timers	3H
Intrusion alarms	12C
Inverters	2D
Irons, pulling-in	1C
Irons, soldering	12H
Isolating bush mounts	12N
Isolating switches	6D
Isolating transformers	2B

J

Jacks, cable-pulling	12B
Jacks & jack screws	12D
Jacks, pole line	12A
Junction boxes	5D
Junction boxes, pole base	5D

K

Kettles, melting	12J
Key-operated switches	5A, 3H
Kilowatt-hour meters	10A
Kits, cable-splicing	6F
Knife switches	3G
Knives, cable sheath-splitting	12B
Knobs, wire & cable	6G
Knockout blanks	5E
Knockout punches	12C
Kraft paper	12Q
Kva meters	10A

L

Laboratory switchboards	3C
Lacing hooks	12D
Lacing twine	12V
Ladders	12D
Ladders, manhole	1C
Lamp accessories	5C
Lamp bulbs	9G

Lamp changers	12L
Lamp dimmers	3J
Lamp disposal units	12J
Lamp-failure indicators	10E
Lamp sockets & holders	3C
Lamp wire	6D
Lamps, floor and table	3A
Lamps, fluorescent	9F
Lamps, incandescent	9G
Lamps, portable	9A, 9E
Lamps, trouble	8C
Leads, floor and table	3A
Lead wire	6D
Leaders, fish tape	12B
Leads, test	12L
Leads, wire-coiled	6D
Level indicators	10B
Lift trucks	12D
Lift & towers, mobile	12B
Lifting magnet connectors	6F
Lifts	12B
Light dimmers	3J
Light meters	10A
Lighting fixtures	9A to 9E
Lighting fixtures & fans, combined	11F
Lighting fixtures & heaters, combined	11A
Lighting glassware, louvers & reflectors	9H
Lighting standards	9D
Lightning protective equipment	4E
Lights, night	9A
Limit switches	12D
Line hardware	12D
Line splices	12D
Line trucks	12B
Linemen's protective clothing	12A
Linemen's tools	12A
Links, high-voltage fuse cutout	4A
Links, renewable fuse	4C
Liquid-flow-activated switches	3H
Liquid-flow indicators & alarms	10B
Liquid-level alarms	10B
Liquid-level switches & controls	3H
Liquid-tight flexible metallic conduit	7G
Load centers	3M
Load indicators	10B
Load resistors	12P
Locator systems	10F
Locators, ground	10C
Locators, metal & outlet	10C
Locking-type caps & receptacles	5E
Locknuts, conduit	12C
Locks, lamp	5C
Louvers, lighting fixture	9H
Low-voltage control systems	3L
Lubricant, wire-pulling	12V
Lugs, wire & cable	6F
Lumiline cap switches	5A
Lumiline lamp holders	5C
Luminaires	9A to 9D
Luminous ceilings	9A, C

M

Machine accessories	12M
Machine lights	9E
Machine process controls	3K
Machine tool transformers	2B
Machines, soldering	12H
Magnet coils	12V
Magnet wire	6D
Magnetic amplifiers	2K
Magnetic brakes	2K
Magnetic contactors & starters	3M
Magnetizers	12J
Magnets	10C
Magnets, permanent	3K
Maintenance trucks	12P
Mandrels, conduit	12C
Manhole equipment	1C
Manual starters	3M
Marine lighting	9D
Marine motors	8D
Marine wire & cable	6D
Markers, conduit	7E
Markers, pole	1D
Markers, wire & cable	12V
Masking tape	12R
Masks, face protective	12R
Masonry anchors	12K
Masonry drills	12M
Master antenna systems	10F
Masts, service entrance	7E
Mat-operated switches	3H
Materials handling equipment	12D
Mats, floor, heated	9A
Mats, switchboard	12U
Measurers, conduit	12C
Measurers, wire	12B
Mechanical rectifiers	2C
Mechanisms, switch-operating	3J
Melting pots	12J
Mercury control switches	2H
Mercury light switches	5A
Mercury-turbine generators	8F
Mercury-vapor fixtures	9C
Mercury-vapor lamps	9F
Metal benders	12J
Metal cutters & shears	12M
Metal locators	10C
Metallizers	12J
Motor cabinets	5F
Motor seals	12V
Motor sockets & mounts	5F
Motor testers	10A
Metering & control switchboards	3C
Meters	10A
M-G sets	12O
Wires, insulation	12O
Miniature lamps	9G
Miniature switches	3H
Mining machine motors	8D
Mobile towers	1B
Molded category cord sets	6F
Molding, ground wire	7H

Momentary-contact switches	15A
Motor balancers	12E
Motor brushes	12P
Motor control centers	3M
Motor controls	3M
Motor-generators	8E
Motor oils	12J
Motor overload protectors	4E
Motor replacement parts	12P
Motor single-phasing protection	4E
Motor speed controls	12P
Motor-starting capacitors	12P
Motors	8A to 8D
Mounting brackets, transformer	2A
Mountings, meter	5H
Mounts, shock-isolating	12N
Multi-outlet assemblies	5B

N

Nails, pole-dating	1D
Nameplates	12N
NEC cable designations	6A, B, C
Neon lamps	9G
Network protectors	4E
Neutralizers, static charge	12N
Night lights	9A
Nipples, conduit	7E
Non-metallic boxes	12D
Nozzles, floor outlet	5E
Nurses' call systems	10F
Nuts, wire	6F

O

Obstruction lighting	9D
Ohmmeters	10A
Oil burners	8D
Oil burner switches	5A
Oil fuse cutouts	4A
Oil switches	10C
Oilers, motor	12N
Open-link fuses	4B
Openers, door & gate	3J
Oscilloscopes	10C
Outdoor lighting	9A, 9D
Outlet boxes	12J
Outlet locators	12J
Outlet nozzles, floor	5E
Outlets, convenience	5B
Outlets, television antenna	5B
Outlets, weatherproof	12A
Ovens, electric	11C
Overload protectors, ballast	4E
Overload protectors, motor	4E

P

PAR lamps	9G
Paid ratings equipment	12J
Paging systems	10F
Paint, insulating	12U
Panelboard cabinets	5F
Panelboards	3D
Panels, distribution	3D
Panels, electric heating	12A
Panels, electroluminescent	9A
Panels, lighting fixture	9H
Panels, service entrance	3D
Paper insulation	12Q, 12U
Parking lot lighting	9D
Parkway cable	6D
Parts storage equipment	12D
Paste, soldering	12V
Pathway lights	9A
Patio lights	9A
Peak load controls	2K
Peak load indicators	10B
Pendant switches	5A
Permanent magnets	3K
Plants, angle meters	10A
Phase converters	2D
Phase sequence indicators	10B
Phase-shifting transformers	2B
Photoelectric controls	2H
Photoelectric indicators & alarms	10B
Photographic (arc) lighting	9C
Pickups, conduit tool	12C
Pike poles	12A
Pilot light assemblies	12C
Pins, clay duct	1C
Pipe-heating cable	11C
Pipe pushers	12C
Pipe-thawing transformers	2B
Pipe vises	12J
Plugs, power-generating	12P
Plastic-coated conduit	7D
Plastic-coated EMT	7F
Plastic conduit	7D
Plastic insulation	12Q
Plastic sheathing	12M
Plastic tape	12R
Platers	12J
Plates, switch & outlet box	5E
Platforms, pole	12D
Platforms, work	12D
Plating equipment	12J
Pliers, electrician's	12L
Plug fuses	4B
Plug-in bushway	9B
Plug-in attachments	6B
Plugs, conduit-sealing	7E
Plugs, dummy fuse	4C
Plugs, fused	6B
Plugs, knockout	10C
Polarity testers	10C
Pole base boxes	5D

Pole equipment	1D
Pole-hole diggers	1B, 1A
Pole jacks	12A
Pole-setting trucks	1B
Poles, pike	12A
Poles, power line	1A
Poles, street lighting	9D
Polyester film insulation	12Q
Polyester tapes	12S
Polyethylene tapes	12S
Polypphase motors	8E
Porcelain insulating products	12E
Portable air conditioners	11E
Portable blowers	12J
Portable cord sets	6E
Portable electric heaters	11A
Portable electric saws & drills	12M
Portable emergency lighting	9E
Portable fans	11F
Portable heavy-duty switches	3H
Portable lamps	9A, 9E
Post lanterns	9A
Posts, binding	6F
Potentiometers	10A
Potholes	6F
Pots—molding, glue & compound	12J
Pots, solder	12H
Pouches, tool	12A, 12K
Powder-actuated fastening tools	12K
Powder plating equipment	12J
Power cord switches	3H
Power driven motors	12C
Power factor capacitors	2P
Power factor meters	10A
Power generating sets	8F
Power switches	3G
Power tool motors	8D
Power wire & cable	6A
Preheaters, wire	11C
Preservative, wood	12V
Pressboard	12Q
Presses, arbor	12J
Pressure-conductor tools	12B
Pressure connectors	6F
Pressure-sensitive tape	12R
Pressure switches	3H
Preventives, rust & corrosion	12H
Pricing service	12X
Primary batteries	2E
Primary switches	3P
Private telephone systems	10F
Process controls	4K
Program clock systems	4K
Protection, cathodic	4E
Protective clothing	12A, 12V
Protective device analyzers	10C
Protective equipment (clothing)	12W
Protective equipment (electrical)	4A, B, C, D, E
Protective gaps, capacitor	4E
Protective relays	3N
Protectors, blast	4E
Protectors, motor overload	4E
Protectors, network	4E
Protectors, single-phasing	4E
Pruners, tree	12A
Public address systems	10F
Public building lighting	9C
Pull boxes	5D
Pull-in guides, cables & wire	12B
Pullers, cable	12B
Pullers, fish tape	12B
Pullers, fuse	12J
Pulleys, cable-pulling	12B
Pulling compound, wire	12V
Pulling elbows	7E
Pulling-in bars	1C
Pump cable	6D
Pump controls	3J
Pump motors	8D
Pumps, bending & pushing	8D
Pumps, heat	12C
Pumps, manhole	11B
Pumps, manhole	12C
Punches, knockout	12C
Pushbutton stations	3M
Pushbutton switches	6A
Pushers, pipe	12C

Q

Quartz, fused	12U
Quartz-lamp holders	5C
Quartz lamps	9G

R

Raceway	7A to 7L
Raceway & fixtures supports, combined	7H
Raceway tools	12C
Racks, cable	1C, 6G
Racks, conduit	12C
Radiators, steam electric	11A
Radiators, transformer	2A
Radio systems, 2-way	10F
Radioisotope-actuated light sources	7H
Rails, conductor	6J
Rails, manhole guard	1C
Railway cable	6D
Railway motors	8D
Range cords	6E
Range hoods	11F
Range receptacles	3E
Reactors, saturable	3E
Reamers, conduit	12C
Receptacles	5B
Recording-type meters	10A
Rectifiers	10A
Rectifying transformers	2C
Reducers, fuse clip	4C
Reducers, lamp socket	12B
Reel lifts, wire	6E
Reel-type trouble lamps	9E
Reels, cable	12B

Reels, fish tape	12M
Reflector-flood lamps	9G
Reflectors, lighting fixture	9H
Registers, in-and-out	10F
Regulators, motor speed	3M
Regulators, voltage	3P
Relays	3N
Remote control cord sets	6E
Remote control switches	3H
Removers, fuse adapter	4C
Removers, wedge	4C
Residential	9A
Resistance testers	10C
Resistors, dc fluorescent circuit	5C
Resistors, load	3P
Respirators	12E
Resurfacing	12E
Retracting cords	6E
Revolution counters	10B
Rheostats	2P
Rigid conduit	10B
Rings, collecting	6F
Rings, drive & bridle	6G
Rings, slip	12P
Rippers & strippers, wire	12B
Rods, armour	1D
Rods, ground	4E
Rods, insulation	12Q
Rolling stock, pole line	1B
Rotary converters	2D
Rotary relays	3N
Rotary switches	6A
Rubber tape	12R
Rubber tubing	12T
Running-thread, conduit	7E
Rust-preventatives	12V

S

Safety switches	3G
Saturable reactors	3K
Saws, commutator	12E
Saws, hole	12M
Saws, portable electric	12M
Scaffolding	12D
Scissors, electrician	12E
Scrapers, slot	12E
Screw-anchoring compounds	12K
Screw-on wire connectors	6F
Screw sockets	5C
Screws, jack	12L
Screwdrivers, electrician	12L
Sealed beam lamps	9G
Sealing compound, bolt	12K
Sealing compound, cable	12V
Sealing compound, conduit	7E
Sealing devices, conduit	7E
Seals, cable end	6F
Seals, conduit	7E
Seals, meter	12V
Searchlights	9D
Seaters, brush	3E
Secondary batteries	2E
Selenium rectifiers	2C
Self-coiling cords	6E
Series street lighting	6D
Service entrance & drop cable	6D
Service entrance hardware	7E
Service entrance panels	3D
Service entrance switches	3G
Service, estimating & pricing	12X
Service station lighting	9D
Servo components	3K
Setters, pole	1B
Sets, balancing	8F
Sets, generating	8F
Sets, M-G	8F
Sewing machine motors	8D
Shafts, flexible	12P
Shears, metal	12M
Sheet insulation	12C
Shelving, parts storage	12D
Shields, cable	1C
Shields, expansion	12K
Shields, face protective	12W
Shields, manhole	1C
Shifters, phase	2D
Shims, motor & generator	12P
Shock-isolating mounts	12N
Shoes, collecting	6F
Showcase lighting	9C
Sidewalk boxes	5D
Sign cable, gas tube	6D
Sign lighting	9D
Signal & communication cable	6D
Signal equipment	10F
Signaling transformers	2B
Signs, lighted display	9C
Silicon rectifiers	2C
Silicone insulation	12Q
Silicone sheaving	5T
Silicone tape	12S
Silk insulation	12Q
Single-phase motors	8B
Single-phasing protection	4E
Slits	12V
Slate, electrician	12U
Sleeving, flexible	12T
Slip rings, motor & generator	12P
Slot scrapers & files	12E
Slot wedges & sticks	12E
Smoke alarms	10B
Snap switches	3H
Soapstone conduit	7D
Socket accessories	5C
Sockets, lamp	5C
Sockets, lamp	5C
Sockets, meter	5H
Sodium-vapor fixtures	9C
Sodium-vapor lamps	9F
Soil-heating cable	12V
Solder	12C
Soldering equipment	12H
Soldering flux & paste	12V

Soldering transformers	2B
Solderless connectors	6F
Solenoid coils	12V
Solenoid-operated brakes	3K
Solenoid valves	3K
Solenoids	3K
Sound-level indicators	10B
Sound-powered telephones	10F
Sound systems	10F
Sounding devices	10F
Space heaters, electric	11A
Splices, cable	6G
Speed regulators & controls	3M
Splash-proof motors	8C
Splices & kits	12V
Splicing compound	12V
Splicing tools	12B
Spotlights	9D
Sprayers	12J
Spreaders, coil	10B
Sprinkler alarms	10B
Stage lighting	9C
Stage lighting cable	6D
Stage switchboards	3C
Stair tread lights	8A
Stands, lighting	12D
Stands, armature	12E
Stands, pipe vise	12C
Stands, soldering	12H
Stands, wire & cable	12B
Staplers, wire	12B
Staples, cable	6G
Star drills	12M
Starter sockets	5C
Starters, fluorescent lamp	12C
Starters, motor	12C
Static balancers	12E
Static controls	3K
Static converters	2D
Static neutralizers & eliminators	12N
Stations, pushbutton	3M
Stator fields	12E
Steam boilers (electric)	11C
Steam-powered generators	8F
Steam radiators, electric	11A
Steam manhole	1C
Sticks, disconnect	12A
Sticks, slot	12P
Stocks, conduit threading	12C
Stones, commutator	12E
Stones, batteries	2E
Storage equipment	12E
Strain-relief bushings	6G
Strand benders	12B
Straps, conduit	12V
Street lighting	9D
Street lighting cables	6D
Street lighting controls	3J
Stringing equipment, wire	12A
Strip heaters	11C
Strippable fuse	4C
Strippers, wire	12B
Stripping compound, wire	12V
Stroboscopes	10C
Structure, cable-supporting	6E
Studs, lighting fixture	5E
Submarine cable	6D
Submersible boxes	6D
Submersible motors	8C
Substations, unit	8A
Suburban cable	5E
Supports, box	5E
Supports, busbar	6H
Supports, catenary	1D
Supports, conductor	12E
Supports, conduit	3M
Supports, lighting fixture	5G, 9H
Supports, lighting fixture & raceway combined	7H
Surface raceway	7H
Switch boxes	5F
Switch cabinets	5F
Switch-operating mechanisms	3J
Switchboard mats	12U
Switchboards	12C
Switches, disconnect	3M
Switches, drum	3M
Switches, explosion-proof	3G
Switches, field discharge	3K
Switches, power	3E
Switches, primary	3F
Switches, wiring device	5A
Switchgear	8B
Switching systems, low-voltage	3L
Switchplates	12D
Switching converters	2D
Synchronous motors	8P
Synchrosopes	10B

T

T-bars, lighting fixture	9H
Table lamps	9A
Tachometers	10A
Tags, wire & cable	12V
Tamper, coil	12D
Tamping bars	12A
Tanks, melting	12J
Tap-changing equipment	2A
Tap-changing transformers	2B
Taps, coil	12R, 12S
Tape, heating	11C
Tapers, coil	12F
Taps, cord-connecting	6B
Taps, fused	5B
Telephone systems	10F
Television/ac combination outlets	5B
Television antenna outlets	5B
Television, industrial & commercial	10F
Temperature controls	3J
Temperature indicators	10C
Tents, manhole	1C
Terminal blocks	6F
Terminal boxes, motor & generator	12P

Terminals, wire & cable.....	6F
Terminators, cable.....	6F
Test leads & clips.....	12L
Testing instruments.....	10C
Thawing transformers.....	2B
Theater switchboards.....	3C
Thermal lamp starters.....	6C
Thermal overload devices.....	4E
Thermal protectors, ballast.....	4E
Thermistors.....	3F
Thermostat wire & cable.....	6D
Thermostats.....	3J
Thinwall conduit.....	7G
Thru guards, conduit.....	7E
Threaders, conduit.....	12C
Through-cord switches.....	3A
Ties, cable.....	6G
Time switches & timers.....	3H
Timing motors.....	3D
Timing & time delay relays.....	3N
Toggle bolts.....	12K
Toggle switches.....	3A
Tongs, pole.....	12A
Tool bags & holders.....	12L
Tool chests.....	12D
Tool motors.....	12C
Tool pickups & grapples.....	12C
Tool pouches, buckets & bags.....	12A, 12L
Tools, armature & stator repair.....	12E
Tools, cable & wire.....	12B
Tools, coil.....	12F
Tools, hand.....	12L
Tools, insulation.....	12G
Tools, linemen's.....	12A
Tools, portable electric.....	12M
Tools, fastening.....	12K
Tools, runway.....	12C
Tools, shop—miscellaneous.....	12J
Tools, soldering.....	12H
Torches, soldering.....	12H
Totally enclosed motors.....	3C
Towers, conductor-supporting.....	1A
Towers, floodlighting.....	3D
Towers, mobile construction.....	1B
Towers, work.....	12D
Traffic signals.....	3D
Trailer cable.....	6D
Trailer park panels.....	3D
Trailers, office & workshop.....	12D
Trailers, pole.....	12B
Transfer, switches.....	3G
Transformer bushings.....	3A
Transformer cabinets.....	3F
Transformer gins.....	12A
Transformer mounting brackets.....	3A
Transformer radiators.....	3A
Transformer tap-changing equipment.....	3A
Transformers.....	2A, 2B
Trays, cable-supporting.....	6G
Tree trimmers & pruners.....	12A
Trench braces.....	1C
Trenchers.....	1B
Trenching tools, hand.....	12A
Trimmers, tree.....	12A

Trolley duct.....	7B
Trolley wire.....	6D
Trouble lamps.....	3E
Troughs, cable-supporting.....	6G
Troughs & mountings, meter.....	6H
Truck bodies.....	1B, 12D
Trucks, construction.....	1B
Trucks, hand.....	12D
Trucks, lift.....	12D
Trucks, maintenance.....	12D
Tube-to-cable connectors.....	6F
Tubes, fluorescent.....	9D
Tubes, lighting (standards).....	9D
Tubing, electric metallic.....	7F
Tubing, flexible.....	12T
Tubing, insulation.....	3A
Turner switches.....	3F
Turbine-powered generators.....	12G
Turners, paper.....	12G
Turns-ratio, testers.....	10C
Turntables, cable.....	12A
Turntables, display.....	12N
Twine, banding & lacing.....	12M
Twisters, wire.....	12B
Two-way radio systems.....	10F

U

Ultra-violet lamps.....	9G
Undercutters, armature.....	12E
Underfloor duct.....	7K
Underground boxes.....	5D
Underwater lighting.....	9D
Unit heaters, electric.....	11A
Unit substations.....	3A

V

Vacuum cleaners.....	12J
Vacuum switches.....	3H
Valves, electrically operated.....	3K
Vaporproof circuit breakers.....	1D
Vaporproof lighting fixtures.....	9C
Variable-speed drives.....	8J
Variable voltage transformers.....	2B
Varistors.....	3P
Varmeters.....	10A
Varnish.....	12U
Varnished cambric tape.....	12H
Varnished canvas.....	12U
Varnished insulation.....	12Q
Ventilating equipment.....	11F
Ventilators, manhole.....	1C
Vibration-isolating mounts.....	12N
Vises, pipe.....	12C
Volt-ammeters.....	10A
Voltage-regulating transformers.....	2B
Voltage regulators.....	3P
Voltage testers.....	10C

W

Wall air conditioners.....	11E
Wall anchors.....	12K
Wall plates.....	3E
Warning lights.....	9C
Water-cooled leads.....	6D
Wattmeters.....	10A
Weatherproof boxes.....	5H, D
Weatherproof cabinets.....	5F
Weatherproof covers & plates.....	5E
Weatherproof lighting.....	9A, 9D
Weatherproof motors.....	8C
Weatherproof outlets.....	5B
Weatherproof sockets.....	5C
Weatherproof switches.....	5A
Wedge drivers & removers.....	12G
Wedges, slot.....	12M
Welders.....	13J
Welding cable.....	6D
Welding controls.....	3J
Welding flux.....	12M
Welding transformers.....	2B
Welding-type cable connectors.....	6F
Whistles.....	10G
Winches, cable-pulling.....	12B
Winders, coil.....	12F
Windings, motor & generator.....	12P
Window air conditioners.....	11E
Wire, cable & cords.....	5A, B, C, D, E
Wire & cable compounds.....	12M
Wire & cable reels.....	12B
Wire & cable supports.....	6G
Wire & cable tools.....	12B
Wire, fish.....	12B
Wire-installation guns.....	12B
Wire preheaters.....	11C
Wire-stringing equipment.....	12A
Wire & strip, fuse.....	4C
Wire stripping.....	12B
Wire-stripping compound.....	12M
Wire tags & markers.....	12M
Wireholders, pole line.....	1D
Wireways.....	7L
Wiring device boxes.....	5D
Wiring device switches.....	5A
Wiring devices.....	5A to 5G
Wood preservative.....	12V
Work towers.....	12D
Woven tape.....	12S
Wrapping, cable.....	12U
Wrought-iron conduit.....	7D

X-Y-Z

Yard lights.....	9D
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SECTION 1. OUTDOOR DISTRIBUTION EQUIPMENT

See index for transmission line utilization equipment such as switches, transformers and cut-outs.

1A. CONDUCTOR SUPPORTING STRUCTURES

1. Crossarms
2. Poles
3. Towers

Basic equipment used to support outdoor power transmission line conductors.

American Crossarm Works Inc	1305 Dublin St (Box 4008) New Orleans 18 La (1-2)
American Crossarm & Conduit Div	A Chance Co 7726 Sheridan Rd Chicago 26 Ill (1)
Bell Lumber & Pole Co	524 Midland Bank Bldg Minneapolis 1 Minn (2)
Bodendick Tool Co	P O Box 499 Taylorville Ill (1)
Brooks Lumber Co	P O Box 153 Bellingham Wash (1)
Brown Wood Preserving Co	409 Commonwealth Bldg Louisville 2 Ky (2)
Carney (BJ) & Co	411 Peyton Bldg Spokane 8 Wash (2)
Graybar Electric Co Inc	420 Lexington Ave N Y 17 N Y (2)
Hailey (R G) & Co Inc	767 Spitzer Bldg Toledo 4 Ohio (1-2)
Hatheway & Patterson Co Inc	15 County St Mansfield Mass (1)
Hubbard & Co	6301 Butler St Pittsburgh 1 Pa (1)
Hughes Bros Inc	Seward Neb (1-3)
Husky Products Inc	5300 Vine St Cincinnati 17 Ohio (3)
International Paper Co	Wood Preserving Div Kansas City 6 Mo (2)

Joslyn Mfg & Supply Co	3700 S Morgan St Chicago 9 Ill (1-2)
Koppers Co Inc	Wood Preserving Div 750 Koppers Bldg Pittsburgh 19 Pa (2)
Line Material Industries	McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1)
McFarland (L D) Co	McFarland Bldg Sandpoint Idaho (2)
Poles Inc	E 706 Sprague Ave Spokane 3 Wash (1-2)
National Pole & Treating Div	Minnesota & Ontario Paper Co 500 Investors Bldg Minneapolis 2 Minn (2)
Republic Crosscutting Co	1615 Merchants Bank Bldg Indianapolis 4 Ind (1-2)
Texas Crosscutting Co	P O Box 131 Orange Tex (1-2)
Union Metal Mfg Co	1432 Maple Ave Canton 5 Ohio (3)

1B. LINE TRUCKS & MOBILE EQUIPMENT

1. Earth-boring trucks & machines
2. Mobile towers & lifts
3. Pole-setting trucks & bodies
4. Trailers & dinkies
5. Trenchers & ditchers

Apparatus used to transport, erect and maintain power transmission line equipment.

Adams Engineering Co	31711 Solon Rd Solon Ohio (1-4)
Barber-Greene Co	400 N Highland Ave Aurora Ill (5)
Charles Machine Works Inc	P O Box 66 Perry Okla (5)
Cleveland Trencher Co	20100 St Clair Ave Cleveland 17 Ohio (5)
Emhart Mfg Co	Skyworker Div 768 Windsor St Hartford 1 Conn (2)
F W D Corp	105 E 12 St Clintonville Wis (1-3)
Highway Trailer Co	405 E Fulton St Edgerton Wis (1-3-4)

Holan Corp	4100 W 150 St Cleveland 35 Ohio (1-2-3-4)
McCabe-Powers Body Co	5900 N Broadway St Louis 15 Mo (1-2-3-4)
Mercury Hydraulics Inc	1632 Wazee St Denver 2 Colo (5)
Mobile Aerial Towers Inc	1730 N Harrison St Fort Wayne Ind (2)
Morrison Steel Products Inc	601 Amherst St Buffalo 7 NY (1-2-3)
Pitman Mfg Co	Garner Ave & Duck Rd Grandview Mo (2)
Safety Live Line Tool Co	973 86th Ave Oakland 21 Calif (4)
Salem Tool Co	767 S Ellsworth Ave Salem Ohio (1)
Silent Hoist & Crane Co	841 63rd St Brooklyn 20 NY (2-3)
Stahl Metal Products Inc	3490 W 140 St Cleveland 11 Ohio (4)
Utility Body Co	1530 Wood St Oakland 7 Calif (2-3)
Williams (Hugh B) Mfg Co	8330 Lovett St (P O Box 7815) Dallas Tex (1-3)

1C. MANHOLE & TRENCH EQUIPMENT

1. Cable duct shields
2. Cable racks, hangers, arms, hooks & extensions
3. Clay duct dowel pins
4. Guard rail, shields & tents
5. Manhole cover hooks
6. Manhole frames & covers
7. Manhole ladders
8. Manhole steps
9. Pulling-in irons
10. Pumps
11. Ventilators
12. Trench braces

Basic underground equipment used in providing access to cable runs.

Alhambra Foundry Co Ltd	1147 Meridian Ave Alhambra Calif (6-7-8)
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Aurora Pump Div New York Air Brake Co 54
Loucks St Aurora Ill (10)
Barry (William B) Co 117 Causeway St Boston 14
Mass (1)
Chain Belt Co 4701 W Greenfield Ave Milwaukee
Wis (10)
Chance (A B) Co 210 North Allen St Centralia
Mo (1-2-3-7-9)
Cope (T J) Div Rome Cable Corp Third & Walnut
Sta Collegeville 5 Pa (1-2-4-5-6-8-9)
Coppus Engineering Corp 344 Park Ave Worcester
Mass (11)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa
(1-2-3-7-8-9)
Husky Products Inc 5300 Vine St Cincinnati 17
Ohio (2)
Hypro Engineering Inc 700 39th Ave N E Minne-
apolis 21 Minn (10)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago
9 Ill (2-9)
Line Material Industries McGraw-Edison Co 700 W
Michigan St Milwaukee Wis (2-9)
Oliver Electrical Mfg Co P O Box 217 Battle Creek
Mich (1-2-3-7-8-9)
Piqua Machine & Mfg Co 441 S College St Piqua
Ohio (10)
St Louis Malleable Casting Co 7701 N Conduit Ave
St Louis 15 Mo (2)
Steel City Electric Co 1207 Columbus Ave Pitts-
burgh 33 Pa (2)
Sumo Pumps Inc P O Box 983 Stamford Conn
(10)
Swett (A L) Iron Works 166 Glenwood Ave Medina
NY (6-8-12)
Thor Corp 2115 S 54 Ave Chicago 50 Ill (10)
United Electric Motor Co 178 Centre St NY 13
NY (11)
Utilities Service Co 1 Pine St Allentown Pa
(2-7-8)

1D. POLE & TOWER EQUIPMENT

1. Anchoring & guying materials
2. Dating nails & markers
3. Grounding equipment
4. Insulators & wireholders
5. Pole, crossarm & line hardware
6. Platforms & accessories

Pole & crossarm hardware includes such materials as dead ends, armor rods, line splices, brackets, special bolts and pins, catenary supports, etc.

Blackburn (Jasper) Corp 1525 Woodson Rd St
Louis 14 Mo (3)
Brewer-Titchener Corp 111 Port Watson St Cort-
land NY (5)
Chance (A B) Co 210 North Allen St Centralia
Mo (1-2-3-4-5)
Chase Brass & Copper Co Inc 236 Grand St Water-
bury 20 Conn (2)
Copperweld Steel Co Wire and Cable Div Glassport
Pa (1-2-3)
Delta-Star Electric Div H K Porter Co Inc 2437
Fulton St Chicago 12 Ill (1-4)
Dixie Electrical Mfg Co P O Box 745 Birmingham
Ala (1-3-4-5)
Electrolite Mfg Co 2622 E 51st St Cleveland 4
Ohio (4)
Fargo Mfg Co Inc 845 Main St Poughkeepsie NY
(5)
Fletcher Mfg Co 302 E 2nd St Dayton 2 Ohio (5)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave
NY 17 NY (1-2-3-4-5)—ADV PG 4
Grip-Tite Mfg Co 115 W Jefferson St Winterset
Iowa (1)
Haley (R G) & Co Inc 767 Spitzer Bldg Toledo 4
Ohio (5)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa
(1-2-3-4-5)
Hughes Bros Inc Seward Neb (1-3-5-6)
Hussey (CG) & Co 2850 Second Ave Pittsburgh 19
Pa (2)
I-T-E Circuit Breaker Co Victor Insulators Div
Victor NY (3)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago
9 Ill (1-2-3-4-5)
Kearney (James R) Corp 4236 Clayton Ave St
Louis 10 Mo (1)
Kimble Glass Co P O Box 1035 Toledo 1 Ohio (4)
Knox Porcelain Corp 2706 Mynders Ave (P O Box
2031) Knoxville 1 Tenn (4)
Lapp Insulator Co Inc 35 Gilbert St Leroy NY
(4)
Line Material Industries McGraw-Edison Co 700
W Michigan St Milwaukee Wis (1-3-4-5)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (4)
Ohio Brass Co 380 N Main St Mansfield Ohio (4)
Oliver Electrical Mfg Co P O Box 217 Battle
Creek Mich (1-2-3-4-5)
Page Steel & Wire Div American Chain & Cable Co
Inc P O Box 692 Monessen Pa (1)
Penn-Union Electric Corp 315 State St Erie Pa
(1)
Pieper-Lillard Div Jasper Blackburn Corp 1525
Woodson Rd St Louis 14 Mo (1)

Porcelain Products Co 224 N Patterson St Carey
Ohio (3-4-5)
Preformed Line Products Co 5349 St Clair Ave
Cleveland 3 Ohio (1-5)
Premax Products Div Chisholm-Ryder Co Inc Col-
lege & Highland Aves Niagara Falls NY (2-3)
Royal Electric Mfg Co 1122 E 87 St Chicago 19
Ill (4)
Safety Live Line Tool Co 973 86th Ave Oakland
21 Calif (3-6)
St Louis Malleable Casting Co 7701 N Conduit Ave
St Louis 15 Mo (4-5)
South River Metal Products Co Inc 377 Turnpike
South River NJ (1)
Superior Porcelain Co 931½ Market St Parkers-
burg W Va (4-5)
Universal Clay Products Co 1550 First St Sandusky
Ohio (4)
Utilities Service Co 1 Pine St Allentown Pa
(1-2-3-4-5)
Weaver (J A) Co 2110 Howard St St Louis 6 Mo
(3)
Wrought Washer Mfg Co 2280 S Bay St Mil-
waukee 7 Wis (5)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
1-1	Handbook of Treated Forest Products; 45p (American Creosote)
1-2	Anchoring for Power & Communication Lines; 25p (Chance)
1-3	Porcelain Products Data Book; 52p; Cat. No. P-59 (Chance)
1-4	Distribution Equipment Manual; 96p (Line Material)

SECTION 2. TRANSFORMERS AND CONVERSION EQUIPMENT

2A. POWER & LIGHTING TRANSFORMERS, AUTOTRANSFORMERS & ACCESSORIES

1. Dry-type transformers
2. Liquid-filled transformers
3. Transformer radiators
5. Tap-changing equipment
6. Transformer mounting brackets

General-purpose transformers for substations, building light and power, and transmission line distribution.

A C Transformer Corp 89 Madison St Newark NJ (1)
Acme Electric Corp 36 Water St Cuba NY (1)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2)
Atlantic Transformer Co 5143 N 2nd St Phila 20 Pa (1)
Atlantic Transformer Div New London Instrument Co Inc 30 Hynes Ave Groton Conn (1-2)
Barkley Electric Mfg Co 1905 Columbia Ave Middletown Ohio (5)
Central Transformer Corp P O Box 687 Pine Bluff Ark (1-2)
Crittenden Transformer Works Inc 13011 S Spring St Los Angeles 61 Calif (1)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (2)
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (1)
Dongan Electric Mfg Co 2987-3001 Franklin St Detroit 7 Mich (1)
Electro Engineering Works 401 Preda St San Leandro Calif (1)
Erie Electric Co Inc 120 Church St Buffalo 2 NY (1-2)
Esco Mfg Co P O Box 1039 Greenville Tex (1-2)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (1-2)—ADV PG 90-91
General Electric Co Apparatus Sales Div Schenectady 5 NY (1-2-5)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-2)—ADV PG 4
Hewl Duty Electric Co P O Box 563 Milwaukee 1 Wis (1)
Hill Transformer Co Inc 1030 Washington St San Carlos Calif (1-2)
Hindle Transformer Co Inc Woods Church Rd Flemington NJ (1)

Hughes Bros Inc Seward Neb (6)
I-T-E Circuit Breaker Co 1900 Hamilton St Phila-
delphia 30 Pa (1-2)
Jefferson Electric Co 25th & Madison Bellwood Ill (1)
Jeffries Transformer Co 610 Turner St Los Angeles 12 Calif (1)
Koltan Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (1-2)
Kuhlman Electric Co P O Box 288 Birmingham Mich (1-2)
Land-Air Inc 7444 W Wilson Ave Chicago 31 Illinois (1)
Lindberg Engineering Co 2450 W Hubbard St Chicago 12 Ill (1)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-2-5)
●MAGNATRAN INC P O Box 211 Kearny NJ (1-2)—ADV PG 159
●MARCUS TRANSFORMER CO INC Leesville Ave Rahway NJ (1-2)—ADV PG 162
Moloney Electric Co 5390 Birchler Blvd St Louis 20 Mo (1-2-5)
●NIAGARA TRANSFORMER CORP 1751 Dale Rd Buffalo 25 NY (1-2)—ADV PG 160
Notheliff Winding Labs Inc 5 Albemarle Ave (P O Box 455) Trenton 3 NJ (1)
Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa (1-2-5)
●PRECISION TRANSFORMER CORP 2218 W Lake St Chicago 12 Ill (1-2)—ADV PG 118
R T & E Corp 1900 East North St Waukesha Wis (2)
Raytheon Mfg Co Commercial Equipment Div 100 River St Waltham 54 Mass (1)
Shaw-Perkins Mfg Co 201 E Carson St Pittsburgh 19 Pa (3)
●SORGEL ELECTRIC CO 8388 W National Ave Milwaukee 4 Wis (1-2)—ADV PG 155
Standard Transformer Co 140 Dana St N E War-
ren Ohio (1-2)
Uptegraff Mfg Co R E P O Box 182 Scottsdale Pa (1-2)
●WAGNER ELECTRIC CORP 6400 Plymouth Ave St Louis 14 Mo (1)—ADV PG 165
Westinghouse Electric Corp P O Box 868 Pitts-
burgh 30 Pa (1-2-5)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)—ADV PG 2nd COVER

2B. SPECIAL PURPOSE TRANSFORMERS

1. Arc & discharge lamp
2. Control
3. Heating
4. Ignition
5. Instrument
6. Phase-changing or -shifting
7. Rectifying
8. Pipe thawing
9. Signalling
10. Tap-changing
11. Variable voltage
12. Voltage-regulating
13. Welding, soldering & brazing
14. Current-limiting
15. Isolating
16. Furnace control
17. Grounding
18. Machine tool

Transformers designed to serve specific or specialized functions or equipment.

A C Transformer Corp 89 Madison St Newark NJ (2-3-6-7-13)
Accurate Engineering Co 2005 Blue Island Ave Chicago 8 Ill (6)
Acme Electric Corp 36 Water St Cuba NY (1-2-5-6-7-9 thru 13)
Acro Welder Mfg Co 1719 W St Paul Ave Mil-
waukee 3 Wis (13)
Advance Transformer Co 2950 N Western Ave Chi-
cago 18 Ill (1)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (5-7-10-12)
Annis (R B) Co 1101 N Delaware St Indianapolis 2 Ind (5)
Arjac Products Inc 55-59 Halstead St Rochester 10 NY (1)
Associated Research Inc 3789 W Belmont Ave Chi-
cago 18 Ill (5)
Atlantic Transformer Co 5143 N 2nd St Phila 20 Pa (6)
Atlantic Transformer Div New London Instrument Co Inc 30 Hynes Ave Groton Conn (5-9)
Berkshire Transformer Corp Kent Conn (2-3-4-5-7-9-10-13)
Bush Transformer Corp 707 North St Endicott NY (1-2-3-4-5-6-7-9-10-12)
Cable Electric Products Inc 234 Daboll St Provi-
dence 7 RI (9)

Central Transformer Co 900 W Jackson Blvd Chicago 7 Ill (2-9-13)
 Cold Cathode Lighting Corp 42-40 27th St Long Island City NY (1)
 Crest Transformer Corp 1834-36 W North Ave Chicago 22 Ill (2-9)
 Crittenden Transformer Works Inc 13011 S Spring St Los Angeles 61 Calif (3-5-7)
 Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (2)
 Davenport Mfg Co 2532 N Elston Ave Chicago 47 Ill (5)
 Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (2-7-10-12)
 Dongan Electric Mfg Co 2987-3001 Franklin St Detroit 7 Mich (1-2-4-9-18)
 Dormeyer Industries 3418 Milwaukee Ave Chicago 41 Ill (2-4-7-11)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (14)
 Edwards Co Inc Norwalk Conn (9)
 Electran Mfg Co 1901 Clybourn Ave Chicago 14 Ill (1-2-5-6-7-9-10-13)
 Electric Arc Sales Co P O Box 587 Ypsilanti Mich (11)
 Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 Ill (5-15)
 Electro Engineering Works 401 Preda St San Leandro Calif (2-4-6-12)
 Esco Mfg Co P O Box 1039 Greenville Tex (13-16)
 France Mfg Co 10325 Berea Rd Cleveland 2 Ohio (1)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (2-3-4-5-6-7-9-10-11-12)
 General Radio Co West Concord Mass (11)
 Harold Electric Co 210 E Alder St Walla Walla Wash (8)
 Hewi Duty Electric Co P O Box 563 Milwaukee 1 Wis (2-3-6-10-12)
 Hindle Transformer Co Inc Woods Church Rd Flemington NJ (2-3-6-7-9)
 Hugheley & Phillips Inc 3200 North San Fernando Blvd Burbank Calif (15)
 Jefferson Electric Co 25th & Madison Bellwood Ill (1-2-4)
 Jeffries Transformer Co 610 Turner St Los Angeles 12 Calif (2-6-17)
 Knopp Inc 1307 66th St Oakland 8 Calif (5)
 Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (2-6)
 Lee Electric Inc 566 52nd St West New York NJ (9)
 Liberty Bell Mfg Co Inc Swainsboro Ga (9)
 Marcus Transformer Co Inc Leesville Ave Rahway NJ (6-7-13-16)
 McCarthy Electric Co 9640 Grinnell Detroit 13 Mich (13)
 Midwest Electric Products Inc 1515 N Front St Mankato Minn (5)
 Moloney Electric Co 5390 Bircher Blvd St Louis 20 Mo (7-10-12)
 Nepo Mfg Co 4230 N Sayre Chicago 34 Ill (1)
 Netherfield Winding Labs Inc 5 Albermarle Ave (P O Box 455) Trenton 3 NJ (3-5-7-13)
 Nutone Inc Madison & Red Bank Roads Cincinnati 27 Ohio (9)
 Ohmite Mfg Co 3601 Howard St Skokie Ill (11)
 Opad Electric Co 43 Walker St New York 13 NY (7)
 Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (9)
 Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa (3-10-11-13)
 ●PRECISION TRANSFORMER CORP 2218 W Lake St Chicago 12 Ill (2-3-7-13)—ADV PG 118
 Raytheon Mfg Co Commercial Equipment Div 100 River St Waltham 54 Mass (7-13)
 Rittenhouse Co Inc East St Honeye Falls NY (9)
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY (2)
 Sangamo Electric Co 11th & Converse Springfield Ill (5)
 Simplex Co Inc 1139-41 N MacArthur Blvd Springfield Ill (5)
 Sola Electric Co 4633 W 16th St Chicago 50 Ill (1-12)
 Sorensen & Co Inc Richards Ave South Norwalk Conn (6-7-12)
 ●SORGEL ELECTRIC CO 8388 W National Ave Milwaukee 4 Wis (2-3-6-7-8-9-10-13)—ADV PG 155
 Southwestern Industrial Electronics Co 2831 Post Oak Rd (PO Box 13058) Houston 19 Tex (5-7-12)
 Spertl Faraday Inc 1322 E Church St Adrian Mich (1-5-9)
 Standard Electrical Products Co 2240 E Third St Dayton 3 Ohio (11-12)
 Standard Transformer Co 140 Dana St NE Warren Ohio (5)
 States Co 19 New Park Ave Hartford 6 Conn (6)
 Superior Electric Co 83 Laurel St Bristol Conn (11)
 Taylor-Winfield Corp 1052 Mahoning Ave Warren Ohio (3-13)
 Touch-Plate Mfg Corp Box 1970 Long Beach Calif (2)
 Trine Mfg Corp 1430 Ferris Pl New York 61 NY (9)
 United States Electronics Corp 275 Warren St Lynhurst NJ (2)
 Utegraff (RE) Mfg Co PO Box 182 Scottsdale Pa (5)
 Utility Transformer & Equipment Co 702 Lynn Ave Baraboo Ariz (6-7)
 United Transformer Co 150 Varick St New York 13 NY (1-2-3-5-7-9-11-12)
 Western Electro-Mechanical Co Inc 300 Broadway Oakland 7 Calif (5)

Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (1-2-5-6-9-10-11-12)
 Weston Instruments Div Of Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ (5)

2C. RECTIFIERS

1. Copper oxide
2. Electronic tube
3. Germanium
4. Mechanical
5. Selenium
6. Silicon

Apparatus used for industrial applications which require conversion of alternating to direct current.

Accurate Engineering Co 2005 Blue Island Ave Chicago 8 Ill (5)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (3-4-6)
 American Rectifier Corp 95 Lafayette St NY 13 NY (5-6)
 Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (5-6)
 Bradley Semiconductor Corp 275 Welton St New Haven 11 Conn (1-5-6)
 CBS Hytron Div Columbia Broadcasting System Inc 100 Endicott St Danvers Mass (2)
 Cathodic Protection Service 4601 Stanford St Houston Tex (5-6)
 Conant Laboratories Box 3997 Bethany Station Lincoln 5 Neb (1-5)
 Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (2-3-5-6)
 Gates Electronic Co 2090 Barnes Ave Bronx 62 NY (5-6)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (1-5-6)
 Good-All Electric Mfg Co 112 W First St Ogallala Neb (5-6)
 I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (3-4-6)
 ITT Components Div P O Box 412 Clifton NJ (5)
 Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill (5)
 Kneisley Electric Co 2501-2509 Lagrange St Toledo 3 Ohio (2-5)
 Magnatran Inc P O Box 211 Kearny NJ (2)
 Mallory (P R) & Co Inc 30 S Gray St Indianapolis 4 Ind (1)
 Miller (Sanford) Co 691 Bedford Ave Brooklyn 6 NY (5-6)
 Opad Electric Co 43 Walker St New York 13 NY (5)
 Potter & Rayfield Inc P O Box 1042 Atlanta Ga (2)
 Pyramid Electric Co 1445 Hudson Blvd North Bergen NJ (5)
 Radio Receptor Co Inc 240 Wythe Ave Brooklyn 11 NY (5)
 Rapid Electric Co 2881 Middletown Rd Bronx 61 NY (3-5-6)
 Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (2)
 Richardson-Allen Corp 116-15 Fifteenth Ave College Point LI NY (5-6)
 Schauer Mfg Corp 4500 Alpine Ave Rossmore Ohio (1)
 Shrader (FW) Co 11623 S Broadway Los Angeles 61 Calif (5-6)
 States Co 19 New Park Ave Hartford 6 Conn (3)
 Stearns Electric Corp 120 N Broadway Milwaukee 2 Wis (5)
 Sylvania Electric Products Inc 1740 Broadway NY 19 NY (3)
 Syntrol Co 690 Lexington Ave Homer City Pa (5-6)
 Ther Electric & Machine Works 17 S Jefferson St Chicago 6 Ill (1-2-5)
 Versabar Corp 14 Whyte St Jersey City NJ (6)
 Vickers Inc Electric Products Div 1847 Locust St St Louis 3 Mo (5)
 Walker Div Norma-Hoffmann Bearings Corp Stamford Conn (3-5-6)
 Weirton Co 19500 W Eight Mile Rd Detroit 41 Mich (2)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (2-3-5-6)

2D. CONVERTERS

1. Frequency changers
2. Inverters
3. Phase converters & shifters
4. Static converters
5. Synchronous (rotary) converters

Static and rotary converters are used to transform ac current to dc; inverters (static or rotary) are converters which transform dc to ac. Frequency changers convert normal 60-cycle current to a higher frequency; phase converters provide 2- or 3-phase power from a single-phase source, or vice versa.

Air-Hydraulics of Indiana 7769 Lafayette Rd New Augusta Ind (3)
 Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-4-5)
 American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif (1)

Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (1-2-5)
 Carter Motor Co 2711 W George St Chicago 18 Ill (1-2-5)
 Continental Electric Co 1234 S Prairie Ave (P O Box 895) Hawthorne Calif (1)
 Continental Electric Co Inc 325 Ferry St Newark 5 NJ (1)
 Cornell-Dubilier Electric Corp 333 Hamilton Blvd South Plainfield NJ (2)
 D & R Ltd 402 E Gutierrez St P O Box 1500 Santa Barbara Calif (1)
 Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (2-4)
 Dalmator Co 1375 Clay St Santa Clara Calif (1)
 Elcor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill
 Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (1)
 Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind (1)
 Electric Specialty Co 211 South St Stamford Conn (1)
 Electro Devices Inc 888 E Northwest Hwy Mount Prospect Ill (1)
 Elliott Co Jeannette Pa (1)
 Fairbanks Morse & Co 600 S Michigan Ave Chicago 5 Ill (1)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (1-2-3-4-5)
 Georator Corp Manassas Va (1)
 Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1-2-5)
 Ideal Electric & Mfg Co East First St Mansfield Ohio (1-2-3-5)
 Knopp Inc 1307 66th St Oakland 8 Calif (3)
 Jerold Electronics Corp 23rd & Chestnut Sts Phila 3 Pa (1)
 Kato Engineering Co 1442 First Ave Mankato Minn (1-2-3-5)
 Kellogg Switchboard & Supply Co 79 W Monroe St Chicago 3 Ill (1-2)
 Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1)
 Minneapolis-Honeywell Regulator Co Boston Div 40 Life St Boston 35 Mass (4)
 Robbins & Myers Inc 1345 Laganda Ave Springfield Ohio (1)
 Sangamo Electric Co 11th & Converse Springfield Ill (5)
 Sorensen & Co Inc Richards Ave South Norwalk Conn (1-2-4)
 Syntrol Co 690 Lexington Ave Homer City Pa (4)
 System Analyzer Corp 700 W State St Nokomis Ill (3)
 Terado Co 1068 Raymond Ave St Paul 14 Minn (2)
 Tocco Div Ohio Crankshaft Co 3800 Harvard Ave Cleveland 5 Ohio (1)
 Wakefield Co 731 S Water St Vermilion Ohio (1)
 Wakefield Co 19500 W Eight Mile Rd Detroit 41 Mich (1)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (1)

2E. BATTERIES

1. Primary, dry
2. Primary, wet
3. Secondary (storage)

Primary dry cells are replaced when exhausted; primary wet cells may be restored by replacing electrolyte and electrodes when necessary. Secondary or storage batteries are recharged using a primary source of electrical energy.

Bowers Battery & Spark Plug Co Box 1262 Reading Pa (3)
 Bright Star Industries 600 Getty Ave Clifton NJ (1)
 Burgess Battery Co Freeport Ill (1)
 C & D Batteries Inc Conshohocken Pa (3)
 Carbone Corp 400 Myrtle Ave Boonton NJ (1-2)
 Dual-Lite Co Inc Newtown Conn (3)
 DuBois Electric Storage Battery Co 500 W BuBois Ave DuBois Pa (3)
 Edison Storage Battery Div McGraw-Edison Co West Orange NJ (3)
 Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa (3)
 Gould-National Batteries Inc Trenton 7 NJ (3)
 Gulton Industries Inc Alkaline Battery Div Metuchen NJ (3)
 Magnavox Co 2131 Beuter Rd Fort Wayne 4 Ind (1)
 Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind (1)
 Marathon Battery Co P O Box 298 Wausau Wis (1)
 National Carbon Co 30 E 42 St New York 17 NY (1-2)
 Nicad Div Gould-National Batteries Inc Easthampton Mass (3)
 Scranton Cellomatic Battery Corp Archbald Pa (3)
 Scranton Storage Battery Corp Archbald Pa (3)
 Sonotone Corp Battery Div Elmsford NY (3)
 Standard Electric Co Inc P O Box 6356 San Antonio 12 Tex (3)
 Surette Storage Battery Co Inc Jefferson Ave Salem Mass (3)

Willard Storage Battery Div Electric Storage Battery Co 246-286 E 131 St Cleveland 8 Ohio (3)
 Wisconsin Storage Battery Co 1222 18th St Racine Wis (3)
 Yardney Electric Corp 40-50 Leonard St New York 13 NY (2-3)

2F. BATTERY CHARGERS

Equipment, complete with necessary controls, for restoring secondary batteries. May incorporate metallic-oxide rectifiers, electronic tube rectifiers, or motor-generator set.

Accurate Engineering Co 2005 Blue Island Ave Chicago 8 Ill
 Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis
 Automatic Switch Co 50-56 Hanover Rd Florham Park NJ
 Blitz Electric Co 5713 Wentworth Ave Chicago 21 Ill
 Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ
 Bowers Battery & Spark Plug Co Box 1262 Reading Pa
 Christie Electric Corp 3410 West 67 St Los Angeles 43 Calif
 Cornell-Dubilier Electric Corp 333 Hamilton Blvd South Plainfield NJ
 Curtis Development & Mfg Co 3244 N 33 St Milwaukee 16 Wis
 Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill
 Edison Storage Battery Div McGraw-Edison Co West Orange NJ
 Electric Power Plants Corp Buffalo St Cadiz Ohio
 Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio
 Electric Service Systems Inc 1330 Quincy St N E Minneapolis 13 Minn
 Fairbanks Morse & Co 600 S Michigan Ave Chicago 5 Ill
 Fox Products Co 4720 N 18 St Phila 41 Pa
 Gates Electronic Co 2090 Barnes Ave Bronx 62 NY
 General Electric Co Apparatus Sales Div Schenectady 5 NY
 Gould-National Batteries Inc Trenton 7 NJ
 Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio
 Hobart Bros Hobart Square Troy 1 Ohio
 Howard Industries Inc 1760 State St Racine Wis
 Jordan Electric Products Div Electric Storage Battery Co 222-228 N 2nd St Minneapolis 1 Minn
 Kato Engineering Co 1442 First Ave Mankato Minn
 Katolight Corp First Ave at Chestnut (P O Box 891) Mankato Minn
 Kohler Co Kohler Wis
 Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis
 Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio
 Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind

Motoresearch Co 1600 Junction Ave Racine Wis
 Onan (D W) & Sons Inc 2515 University Ave S E Minneapolis 14 Minn (2f)
 Pioneer Gen- E- Motor Co 5841 W Dickens St Chicago 39 Ill
 Quick Charge Inc 10th & Missouri Sts Oklahoma City 17 Okla
 Rex Metal Craft Inc 1717 Gent St Indianapolis 2 Ind
 Richardson-Allen Corp 116-15 Fifteenth Ave College Point LI NY
 Schauer Mfg Corp 4500 Alpine Ave Rossmoyne Ohio
 Sorensen & Co Inc Richards Ave South Norwalk Conn
 Syntrol Co 690 Lexington Ave Homer City Pa
 Terado Co 1068 Raymond Ave St Paul 14 Minn
 Triple-A Specialty Co 2835 N Western Ave Chicago 18 Ill (2f)
 Universal Motor Co 438 Universal Dr Oshkosh Wis
 Walker Div Norma-Hoffmann Bearings Corp Stamford Conn
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa
 Willard Storage Battery Div Electric Storage Battery Co 246-286 E 131 St Cleveland 8 Ohio
 Winpower Mfg Co Newton Iowa

New Jersey Zinc Co 160 Front St New York 38 NY
 Ohmita Mfg Co 3601 Howard St Skokie Ill
 Penn-Union Electric Corp 315 State St Erie Pa
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY
 St Marys Carbon Co State St St Marys Pa
 Sittler Corp 18 N Ada St Chicago 7 Ill
 Stackpole Carbon Co Stackpole St St Marys Pa
 Triple-A Specialty Co 2835 N Western Ave Chicago 18 Ill (26)
 Victor Instrument Mfg Co Inc 33 W 60 St New York 23 NY
 Walker Brothers End St Conshohocken Pa
 Willard Storage Battery Div Electric Storage Battery Co 246-286 E 131 St Cleveland 8 Ohio

2G. BATTERY & CHARGING ACCESSORIES

Auxiliary equipment specifically intended to aid in the use and care of batteries and charging equipment, such as cable leads and clamps, testers, charging plugs and regulators.

Allen Electric and Equipment Co 2101-2117 N Pitcher St Kalamazoo Mich
 Anderson (Albert & JM) Mfg Co 289 A St Boston 10 Mass
 Beiden Mfg Co P O Box 5070A Chicago 80 Ill
 Blitz Electric Co 5713 Wentworth Ave Chicago 21 Ill
 Bowers Battery & Spark Plug Co Box 1262 Reading Pa
 Bryant Mfg Co 410 N Paulina St Chicago 22 Ill
 C & D Batteries Inc Conshohocken Pa
 Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa (2G)
 Fox Products Co 4720 N 18 St Phila 41 Pa
 Gates Electronic Co 2090 Barnes Ave Bronx 62 NY
 Goldak Co Inc 1544 W Glenoaks Blvd Glendale 1 Calif
 Hollingsworth Co Solderless Terminal Div Box 430 Phoenixville Pa
 Jordan Electric Products Div Electric Storage Battery Co 222-228 N 2nd St Minneapolis 1 Minn
 Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo
 Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill
 Mueller Electric Co 1555G E 31 St Cleveland 14 Ohio
 New England Electrical Works Inc 365 Main St Lisbon NH

*Code No.	Description, Pages Catalog No. & Mfr.
2-1	Battery Charging Plugs and Receptacles; 32p; Cat. No. 50D (Anderson)
2-2	Battery Service Manual; 48p (Bowers)
2-3	Batteries for Control, Switchgear & Auxiliary Power; 12p (C&D)
2-4	Transformers, Terminals and Switches; 60p (ESCO)
2-5	Batteries for Industrial Trucks; 8p (Exide)
2-6	Batteries for Switchgear Control, Emergency Light and Power; 24p; Cat. No. 58.00 (Exide)
2-7	Dry Type Transformers; 8p; Cat. No. 200 (Hevi-Duty)
2-8	Unit Substation Transformers; 12p; Cat. No. 5804-1A (I-T-E)
2-9	Power Converters; 30p; Cat. No. 558 (System Analyzer)
2-10	Load Center Transformers; 16p; Cat. No. 132A (Uptegraft)
2-11	Overhead Transformer; 8; No. 135A (Uptegraft)
2-12	Power Transformer Engineering Manual; 12p; Cat. No. 133 (Uptegraft)
2-13	Batteries; 16p; Cat. No. 500-3211 (Willard)

SECTION 3. SWITCHING & CONTROL EQUIPMENT

Indicating devices and alarms used in conjunction with switches and controls are listed in Section 10.

3A. UNIT SUBSTATIONS

Complete assemblies for transformation and distribution of primary power.

Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 3 Wis
 ●CONTINENTAL ELECTRIC EQUIPMENT CO Box 1055 Cincinnati 1 Ohio—ADV PG 3rd COVER
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill
 Esco Mfg Co P O Box 1039 Greenville Tex
 ●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ—ADV PG 90-91
 General Electric Co Apparatus Sales Div Schenectady 5 NY
 General Electric Co Distribution Assemblies Dept 41 Woodford Ave Plainville Conn
 Hughes Bros Inc Seward Neb
 ●I-T-E CIRCUIT BREAKER CO 1900 Hamilton St Philadelphia 30 Pa—ADV PG 103 through 106
 I-T-E Circuit Breaker Co Switchgear Div 1924 Hamilton St Philadelphia 30 Pa

Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis
 Mullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif (3A)
 Mullenbach Div Electric Machinery Mfg Co 2300 E 27 St Los Angeles 58 Calif
 Nelson Electric Mfg Co P O Box 5385 Tulsa Okla
 Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa
 Royal Electric Mfg Co 1122 E 87 St Chicago 19 Ill
 ●SORGEL ELECTRIC CO 8388 W National Ave Milwaukee 4 Wis—ADV PG 155
 Southern Electrical Equipment Co 308 West Bland at Mint St Charlotte 3 NC
 Square D Co 6060 Rivard St Detroit 11 Mich
 Standard Transformer Co 140 Dana St N E Warren Ohio
 ●WESTINGHOUSE ELECTRIC CORP P O Box 868 Pittsburgh 30 Pa—ADV PG 71-72-73-74
 Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo
 Zinsco Electrical Products 729 Turner Los Angeles 12 Calif

3B. SWITCHGEAR

Enclosed assembly of switching and interrupting devices and associated equipment for distribution of power.

Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis
 Cleveland Switchboard Co 2925 E 79 St Cleveland 4 Ohio
 ●CONTINENTAL ELECTRIC EQUIPMENT CO Box 1055 Cincinnati 1 Ohio—ADV PG 3rd COVER
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill
 ●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ—ADV PG 90-91
 G & W Electric Specialty Co 3500 W 127 St Blue Island Ill
 General Electric Co Apparatus Sales Div Schenectady 5 NY
 ●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY—ADV PG 4
 Gustavson Inc 8600 Chestnut St Kansas City 30 Mo
 ●I-T-E CIRCUIT BREAKER CO 1900 Hamilton St Philadelphia 30 Pa—ADV PG 103 through 106
 Lake Erie Electric Mfg Inc 2952 W 22 St Erie Pa
 Marquette Electric Switchboard Co 311 N Desplaines St Chicago 6 Ill
 Mullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif (3B)
 Nelson Electric Mfg Co P O Box 5385 Tulsa Okla
 Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa
 Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY
 ●S & C ELECTRIC CO 4435 Ravenswood Ave Chicago 40 Ill—ADV PG 166

Square D Co 6060 Rivard St Detroit 11 Mich
WESTINGHOUSE ELECTRIC CORP P O Box 868
 Pittsburgh 30 Pa—ADV PG 71-72-73-74
WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway
 Center (Box 448) Pittsburgh 30 Pa—ADV PG
 2nd COVER
 Young Electric & Mfg Co Inc 2134 Curtis Denver 2
 Colo
 Zinsco Electrical Products 729 Turner Los Angeles
 12 Calif

3C. SWITCHBOARDS

1. Metering & control
2. Power & light
3. Stage
4. Laboratory & experimental

Metering & control boards and panels mount devices used to regulate, indicate and record operation of such equipment as boilers, turbines, furnaces and industrial processing equipment.

Adam (Frank) Electric Co 3647 Windsor Pl St
 Louis Mo (2-3)
 Allen-Bradley Co 136 W Greenfield Ave Milwaukee
 4 Wis (2)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1
 Wis (1-2)
 Alwatt Mfg Co 1706 Lapham Dr Modesto Calif
 (1)
 Capitol Stage Lighting Co Inc 527 W 45 St New
 York 36 NY (3)
 Century Lighting Inc 521 W 43 St New York 36
 NY (3)
 Clark Controller Co 1146 E 152 St Cleveland 10
 Ohio (2)
 Clement Electric Co 223 Erie St N W Grand
 Rapids 2 Mich (1-2)
 Cleveland Switchboard Co 2925 E 79 St Cleveland
 4 Ohio (1-2-3)
CONTINENTAL ELECTRIC EQUIPMENT CO Box
 1055 Cincinnati 1 Ohio (1-2-3)—ADV PG 3rd
 COVER
 Control Panel Corp 517 W Monroe St Chicago 6
 Ill (1)
 Cutler-Hammer Inc 228 N 12th St Milwaukee 1
 Wis (2)
 Delta-Star Electric Div H K Porter Co Inc 2437
 Fulton St Chicago 12 Ill (1-2)
 Dixie Controller Inc Post Office Box 5844 Birming-
 ham 9 Ala (1)
 Electric Machinery Mfg Co 800 Central Ave Minne-
 apolis 13 Minn (1-2)
 Esco Mfg Co P O Box 1039 Greenville Tex (2)
FEDERAL PACIFIC ELECTRIC CO 50 Paris St
 Newark 5 NJ (2)—ADV PG 90-91
 Gemco Electric Co 25685 W Eight Mile Rd Detroit
 40 Mich (1-2)
**GENERAL ELECTRIC CO DISTRIBUTION ASSEM-
 BLIES DEPT** 61 Woodford Ave Plainville Conn
 (1-2)—ADV PG 100-101
 Gustavson Inc 8600 Chestnut St Kansas City 30
 Mo (2-3)
 Hub Electric Co 2255 W Grand Ave Chicago 12
 Ill (3)
 I-T-E Circuit Breaker Co 1900 Hamilton St Phila-
 delphia 30 Pa (1-2)
 Ideal Electric and Mfg Co East First St Mansfield
 Ohio (1-2)
 Kato Engineering Co 1442 First Ave Mankato
 Minn (1)
 Kilgill Bros Universal Electric Stage Lighting Co Inc
 321 W 50 St NY 19 NY (3)
 Lake Erie Electric Mfg Inc 2952 W 22 St Erie
 Pa (1-2-3)
 Lake Shore Electric Corp 205 Willis St Bedford
 Ohio (2)
 Leeds & Northrup Co 4970 Stenton Ave Phila 44
 Pa (1)
 Machinery Electrification Inc 56 Hudson St North-
 boro Mass (2)
 Major Equipment Co Inc 4603 W Fullerton Ave
 Chicago 39 Ill (3)
 Marquette Electric Switchboard Co 311 N Desplaines
 St Chicago 6 Ill (2)
 Mullenbach Div Electric Machinery Mfg Co 2100
 E 27 St Los Angeles 58 Calif (2)
 Parker Electrical Mfg Co 221 Washington St Oak-
 land 7 Calif (2)
 Nelson Electric Mfg Co P O Box 5385 Tulsa Okla
 (1-2)
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY
 (2)
 S & C Electric Co 4435 Ravenswood Ave Chicago
 40 Ill (2)
 Southern Electrical Equipment Co 308 West Bland
 at Mint St Charlotte 3 NC (2)
 Square D Co 6060 Rivard St Detroit 11 Mich
 (2-3)
 Standard Electric Time Co 89 Logan St Springfield
 2 Mass (2)
 Viking Instruments Inc East Haddam Conn (1)
WESTINGHOUSE ELECTRIC CORP P O Box 868
 Pittsburgh 30 Pa (1-2)—ADV PG 71-72-73-74
WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway
 Center (Box 448) Pittsburgh 30 Pa (1-2)—ADV
 PG 2nd COVER
 Young Electric & Mfg Co Inc 2134 Curtis Denver 2
 Colo (1-2-3)
 Zinsco Electrical Products 729 Turner Los Angeles
 12 Calif (1-2-3)

3D. PANELS & PANELBOARDS

1. Service, lighting & power
2. Explosion-proof
3. Trailer Park

For circuit division and protection.

Adam (Frank) Electric Co 3647 Windsor Pl St
 Louis Mo (1)
 Alwatt Mfg Co 1706 Lapham Dr Modesto Calif
 (1)
 American Electric Switch Div Clark Controller Co
 1146 E 152 St Cleveland 10 Ohio (1)
 Appleton Electric Co 1701-59 Wellington Ave Chi-
 cago 13 Ill (3)
 Bulldog Electric Products Div I-T-E Circuit Breaker
 Co 7610 Joseph Campau Detroit Mich (1)
 Clark Controller Co 1146 E 152 St Cleveland 10
 Ohio (1)
 Cleveland Switchboard Co 2925 E 79 St Cleveland
 4 Ohio (1)
CONTINENTAL ELECTRIC EQUIPMENT CO Box
 1055 Cincinnati 1 Ohio (1)—ADV PG 3rd
 COVER
CUTLER-HAMMER INC 228 N 12th St Milwaukee
 1 Wis (1)—ADV PG 96
FEDERAL PACIFIC ELECTRIC CO 50 Paris St
 Newark 5 NJ (1)—ADV PG 90-91
 General Electric Co Circuit Protective Devices Dept
 41 Woodford Ave Plainville Conn (1)
 General Electric Co Distribution Assemblies Dept
 41 Woodford Ave Plainville Conn (1)
 General Switch Co 45 Roebling St Brooklyn 11 NY
 (1)
 Gustavson Inc 8600 Chestnut St Kansas City 30
 Mo (1)
 Kellogg Switchboard and Supply Co 79 W Monroe
 St Chicago 3 Ill (1)
 Kinney Electrical Mfg Co 678 Buckeye St Elgin
 Ill (1)
 Kolton Electric Mfg Co 123 New Jersey Railroad
 Ave Newark 5 NJ (1)
 Lake Erie Electric Mfg Inc 2952 W 22 St Erie
 Pa (1)
 Machinery Electrification Inc 56 Hudson St North-
 boro Mass (1)
 Midwest Electric Products Inc 1515 N Front St
 Mankato Minn (1)
 Mullenbach Div Electric Machinery Mfg Co 2100
 E 27 St Los Angeles 58 Calif (1)
 Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16
 NY (1)
 Nelson Electric Mfg Co P O Box 5385 Tulsa Okla
 (1)
 Parker Electrical Mfg Co 221 Washington St Oak-
 land 7 Calif (1)
 Pyle-National Co 1344 N Kostner Ave Chicago 51
 Ill (1-2)
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY
 (1-2)
 Square D Co 6060 Rivard St Detroit 11 Mich (1)
 Sun Electric Products Inc 28 S Day St Orange
 NJ (1)
 United Enterprises 15735 S Paramount Blvd Para-
 mount Calif (3)
WADSWORTH ELECTRIC MFG CO INC 20-34 W
 11th St (Box 272) Covington Ky (1)—ADV
 PG 163-165
WESTINGHOUSE ELECTRIC CORP P O Box 868
 Pittsburgh 30 Pa (1)—ADV PG 6
WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway
 Center (Box 448) Pittsburgh 30 Pa (1)—ADV
 PG 2nd COVER
 Young Electric & Mfg Co Inc 2134 Curtis Denver
 2 Colo (1)
 Zinsco Electrical Products 729 Turner Los An-
 ges 12 Calif (1)

3E. FRAMING & ENCLOSURES

Metal framing members, enclosures, and mounting structures for substation, switch-
 ing, and control equipment.

Acme Steel Co 135th St & Perry Ave Chicago
 27 Ill
 American Steel & Iron Works 5801 S Lowe Ave
 Chicago 21 Ill
 Chicago Wire Iron & Brass Works 2411 W Belmont
 Ave Chicago 18 Ill
CONTINENTAL ELECTRIC EQUIPMENT CO Box
 1055 Cincinnati 1 Ohio—ADV PG 3rd Cover
 Eliza Metal Products Co Box 408 Bridgeville Pa
 Falstrom Co 62 Falstrom Ct Passaic NJ
 Gustavson Inc 8600 Chestnut St Kansas City
 30 Mo
 Handy Angle Div Lug-All Co 355 Lancaster Ave
 Haverford Pa
HOFFMAN ENGINEERING CORP 1050 Tyler St
 Anoka Minn—ADV PG 152-157
 Hope Electric Products Co Inc 27 Long Ave
 Hillside NJ
HUENFELD CO Engineered Products Div 2701
 Spring Grove Ave Cincinnati 25 Ohio—ADV
 PG 109
 I-T-E Circuit Breaker Co Greensburg Div P O Box
 98 Greensburg Pa
 Kirk & Blum Mfg Co 3120 Forrer St Cincinnati 9
 Ohio
 Multi-A-Frame Div Ainsworth Precision Castings
 Co 1471-77 E Atwater St Detroit 7 Mich
 Parker Electrical Mfg Co 221 Washington St Oak-
 land 7 Calif
 Queen Products Co Inc Thirteenth & Rowan Sts
 Louisville 3 Ky
 R & I Equipment Div I-T-E Circuit Breaker Co
 Greensburg Pa

Russell & Stoll Co Inc 125 Barclay St NY 7
 NY
 Spring City Electrical Mfg Co Spring City 85
 Pa
 Steel City Electric Co 1207 Columbus Ave Pitts-
 burgh 33 Pa
 Unistrut Products Co 933 Washington Blvd Chi-
 cago 7 Ill
 Versabar Corp 14 Whyte St Jersey City NJ
 Wisconsin Electrical Mfg Co Inc 1237 S Third
 St Milwaukee 4 Wis
 Young Electric & Mfg Co Inc 2134 Curtis Denver
 2 Colo

3F. PRIMARY SWITCHES

Switches (over 600v) for distribution pole
 lines, structures and equipment.

Chance (A B) Co 210 North Allen St Centalla
 Mo
 Continental Electric Equipment Co Box 1055 Cin-
 cinnati 1 Ohio
 Delta-Star Electric Div H K Porter Co Inc 2437
 Fulton St Chicago 12 Ill
 Electrical Engineers Equipment Co 25th Ave &
 Division St Melrose Park Ill
FEDERAL PACIFIC ELECTRIC CO 50 Paris St
 Newark 5 NJ—ADV PG 90-91
 G & W Electric Specialty Co 3500 W 127 St
 Blue Island Ill
 General Electric Co Apparatus Sales Div Schene-
 tady 5 NY
GRAYBAR ELECTRIC CO INC 420 Lexington Ave
 NY 17 NY—ADV PG 4-148
 I-T-E Circuit Breaker Co 1900 Hamilton St Phila-
 delphia 30 Pa
 Joston Mfg & Supply Co 3700 S Morgan St Chi-
 cago 9 Ill
 Kearney (James R) Corp 4236 Clayton Ave St
 Louis 10 Mo
 Line Material Industries McGraw-Edison Co 700
 W Michigan St Milwaukee Wis
 Memco Engineering & Mfg Co Inc Commack LI
 NY
 Powercraft Corp 2215 De Kalb St St Louis 4
 Mo
 Royal Electric Mfg Co 1122 E 87 St Chicago
 19 Ill
 S & C Electric Co 4435 Ravenswood Ave Chi-
 cago 40 Ill
 Southern Electrical Equipment Co 308 West Bland
 at Mint St Charlotte 3 NC
 Square D Co 6060 Rivard St Detroit 11 Mich

3G. POWER SWITCHES

1. Automatic transfer
2. Dead-front switchboard
3. Isolating
4. Knife
5. Oil
6. Safety
7. Service entrance
8. Explosion-proof

Switches (600v and less) for power distri-
 bution purposes.

Adam (Frank) Electric Co 3647 Windsor Pl St
 Louis Mo (4-6-7)
 Allen-Bradley Co 136 W Greenfield Ave Milwaukee
 4 Wis (1-8)
 American Electric Switch Div Clark Controller Co
 1146 E 152 St Cleveland 10 Ohio (6-7)
 Anderson (Albert & JM) Mfg Co 289 A St Boston
 10 Mass (4)
 Arrow-Hart & Hegeman Electric Co 103 Hawthorn
 St Hartford 6 Conn (6-7-8)
 Automatic Switch Co 50-56 Hanover Rd Florham
 Park NJ (1)
 Barber Electric Mfg Co Inc 30 Chestnut St N
 Attleboro Mass (4-6-7)
 Barkelev Electric Mfg Co 1905 Columbia Ave
 Middletown Ohio (2-4)
 Bulldog Electric Products Div I-T-E Circuit
 Breaker Co 7610 Joseph Campau Detroit Mich
 (6-7)
 Clark Controller Co 1146 E 152 St Cleveland
 10 Ohio (4-7-8)
 Connecticut Electric Mfg Co Main St Bantam
 Conn (4)
 Crouse-Hinds Co Syracuse 1 NY (6)
 Cutler-Hammer Inc 228 N 12th St Milwaukee 1
 Wis (1-6-7-8)
 Delta-Star Electric Div H K Porter Co Inc 2437
 Fulton St Chicago 12 Ill (1-6)
 Derrick Light & Equipment Co 1201 E Daggett
 (P O Box 414) Fort Worth Tex (8)
 Electric Distribution Products Inc 2200 31st St
 S W Allentown Pa (6)
 Electrosnap Corp Switch Div 4218-30 W Lake
 St Chicago 24 Ill (8)
 Esco Mfg Co P O Box 1039 Greenville Tex (5)
FEDERAL PACIFIC ELECTRIC CO 50 Paris St
 Newark 5 NJ (6)—ADV PG 90-91
G & W ELECTRIC SPECIALTY CO 3500 W 127 St
 Blue Island Ill (1-5)—ADV PG 99
 Gemco Electric Co 25685 W Eight Mile Rd
 Detroit 40 Mich (8)

General Electric Co Apparatus Sales Div Schenectady 5 NY (1 thru 6-8)
 General Electric Co Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn (4-6-7-8)
 General Switching Co 45 Roebeling St Brooklyn 11 NY (6-7)
 Graybar Electric Co Inc 420 Lexington Ave NY 17 NY (1-4-5-6-7)
 Hope Electrical Products Co Inc 27 Long Ave Hillside NJ (8)
 I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (2)
 I-T-E Circuit Breaker Co Greensburg Div P O Box 98 Greensburg Pa (3)
 Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (3)
 Kalton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (6)
 ●LAKE SHORE ELECTRIC CORP 205 Willis St Bedford Ohio (1)—ADV PG 130
 Lumenite Electric Corp 497 S Dearborn St Chicago 5 Ill (1)
 Monitor Controller Co 99 Grove St Rockland Mass (1)
 Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (6-7)
 Palmer Electric & Mfg Co 24 Water St Wakefield Mass (1-6-7)
 Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif (6-7)
 Powercraft Corp 2215 De Kalb St St Louis Mo (3-4)
 Pringle Electrical Mfg Co 1900-1512 N Sixth St Phila 22 Pa (3-4-7)
 Pyle-National 1344 N Kostner Ave Chicago 51 Ill (6-8)
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY (8)
 Sangamo Electric Co 11th & Converse Springfield Ill (5)
 Sierra Electric Corp 15100 S Figueroa Gardena Calif (4)
 Square D Co 6060 Rivard St Detroit 11 Mich (1-4-6-7-8)
 Unimax Switch Div W L Maxson Corp Ives Rd Wallingford Conn (8)
 V V Fitting Co 711 Cherry St Phila 6 Pa (2-6)
 ●WADSWORTH ELECTRIC MFG CO INC 20-34 W 11th St (Box 272) Covington Ky (4-6-7)—ADV PG 163-165
 ●WESTINGHOUSE ELECTRIC CORP P O Box 868 Pittsburgh 30 Pa (6)—ADV PG 71-72-73-74
 ●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1 thru 8)—ADV PG 2nd COVER
 Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1-2-3-7)
 Zenith Electric Co 155 W Walton St Chicago 10 Ill (1)
 Zinsco Electrical Products 729 Turner Los Angeles 12 Calif (2-6)

3H. CONTROLS & CONTROL SWITCHES

1. Centrifugal
2. Flashing
3. Flow
4. Foot-operated
5. Footmat-operated
6. Key-operated
7. Limit (lever, toggle or pushbutton)
8. Liquid level (float)
9. Mercury
10. Photoelectric
11. Pressure or vacuum
12. Remote control
13. Rotary tap
14. Timing
15. Miniature
16. Molded power cord
17. Snap
18. Portable, heavy duty

Physically actuated devices performing control functions through the energizing or de-energizing of electrical circuits.

A G A Div Elastic Stop Nut Corp of America 1027 Newark Ave Elizabeth NJ (14)
 Abrams Instrument Corp 606 E Shawnee St Lansing Mich (10-14)
 Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY (8)
 Acro Div Robertshaw-Fulton Controls Co 2348 East Main St Columbus 16 Ohio (7-15)
 Aemco Inc 10 State St Mankato Minn (2-14)
 Aero Instrument Co 11423 Vanowen St North Hollywood Calif (11)
 Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (4-7-8-11-13-14)
 Almo Mfg Co 119 Sussex Ave Newark 3 NJ (9)
 Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (13)
 AutoFyRstop Co 2035 Washington Ave Phila 46 Pa (14)
 Automatic Control Co 995 University Ave St Paul 4 Minn (3-8-9-11-12-14)
 Automatic Devices Co Inc 714 Hillgrove Ave Western Springs Ill (14)
 Automatic Switch Co 50-56 Hanover Rd Florham Park NJ (2-3-12)
 Automation Products Inc 3030 Max Roy St Houston 24 Tex (8)

Autotron Inc 3629 N Vermilion St Danville Ill (10-14)
 B/W Controller Corp 2200 E Maple Rd Birmingham Mich (8)
 Barkelaw Electric Mfg Co 1905 Columbia Ave Middletown Ohio (13)
 Barkley Valve Works 1556 E Slauson Ave Los Angeles 11 Calif (11)
 Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (2)
 Bristol Motor Div Vocaline Co of America Inc Coulter St Old Saybrook Conn (14)
 Cherry Electrical Products Corp 1650 Deerfield Rd Highland Park Ill (17)
 Cincinnati Time Recorder Co 1733 Central Ave Cincinnati 14 Ohio (14)
 Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (4-7-10)
 Controls Co of America 2450 N 32 St Milwaukee 45 Wisc (3-8-11-14-17)
 Conair Inc P O Box 9871 Pittsburgh 16 Pa (3)
 Counter & Control Corp 5225 W Electric Ave Milwaukee 19 Wisc (13-14)
 Cramer Controls Corp Main St Centerbrook Conn (14)
 Crouse-Hinds Co Syracuse 1 NY (2)
 ●CUTLER-HAMMER INC 228 N 12th St Milwaukee 1 Wis (4-6-7-8-11-12-13-14)—ADV PG 96
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (13)
 Dependable-Electric Mfg Co Inc 537 Johnson Ave Brooklyn 37 NY (2)
 Detroit Controls Div American-Standard 5900 Trumbull Ave Detroit 8 Mich (11)
 Dietz (Henry G) Co Inc 12-16 Astoria Blvd Long Island City 2 NY (8-11-14)
 Durant Mfg Co 1987 No Buffum St Milwaukee 1 Wis (10)
 Dwyer (F W) Mfg Co Woodland at Greenwood (P O Box 373) Michigan City Ind (11)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (2)
 Eastern Specialty Co 3617 N 8th St Phila 40 Pa (13)
 Edco International Corp 20722 W Seven Mile Rd Detroit 19 Mich (14)
 Electra Mfg Co 4051 Broadway Kansas City Mo (7-11)
 Electric Switch Corp 2320 S Tibbs Ave P O Box 41037 Indianapolis 41 Ind (2-9-14)
 Electrical Mfg Co 425 Lake Ave Racine Wis (4)
 Electro-Snap Switch & Mfg Co 4218-30 W Lake St Chicago 24 Ill (7-15)
 Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich (10)
 Electronics Corp of America One Memorial Dr Cambridge Mass (10-12-14-15)
 Electrosnap Corp Switch Div 4218-30 W Lake St Chicago 24 Ill (7-15)
 Euclid Electric & Mfg Co 50 Edwards St Madison Ohio (1)
 Ewald Instruments Box 124P Kent Conn (14)
 Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa (14)
 Farmer Electric Products Co Inc 2300 Washington St Newton Lower Falls 62 Mass (10-14)
 Ferrara Inc 8106 W Nine Mile Rd Oak Park 37 Mich (4)
 Fisher-Pierce Co 170 Pearl St South Braintree 85 Mass (10)
 Furnas Electric Co 1067 McKee St Batavia Ill (4-7-8-11-13)
 Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (2)
 Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich (7)
 General Control Co 1200 Soldiers Field Rd Boston 34 Mass (4-17-14)
 General Controls Co 801 Allen Ave Glendale Calif (3-4-7-9-11-14)
 General Electric Co Air Conditioning Div Home Heating & Cooling Dept Troup Highway Tyler Tex (14)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (4-7-8-10 thru 14)
 Grayhill Inc 551 Hillgrove Ave La Grange Ill (7-13)
 Haft & Sons Inc 950 Kent Ave Brooklyn 5 NY (2)
 Haledy Electronics Co 57 William St NY 5 NY (2-3-8-9-10-11)
 Hanksraft Co Control Div Reedsburg Wis (14)
 Haydon (A W) Co 232 N Elm St Waterbury Conn (14)
 Haydon Div General Time Corp 245 E Elm St Torrington Conn (14)
 Hays Mfg Co Industrial Sales Div 12th and Liberty Sts Erie 6 Pa (3)
 Healy-Ruff Co Water Level Controls Div 2255 University Ave St Paul 14 Minn (8-11-12)
 Heat-Timer Corp 657 Broadway New York 12 NY (14)
 Husley & Phillips Inc 3200 North San Fernando Blvd Burbank Calif (2-10)
 Hypro Engineering Inc 700 39th Ave N E Minneapolis 21 Minn (11)
 Industrial Automation Corp 2415 W Montrose Ave Chicago Ill (2-9)
 ●INTERNATIONAL REGISTER CO 2620 W Washington Blvd Chicago 12 Ill (14)—ADV PG 110
 Iron Fireman Mfg Co Electronics Div 2836 S E 9th Ave Portland 2 Ore (14)
 Jo-Bell Products Inc 5456 W 111 St Oak Lawn Ill (3-8)

Jordan Electronics 3025 W Mission Rd Alhambra Calif (14)
 Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (16-18)
 Kneisl Electric Co 2501-2509 Lagrange St Toledo 3 Ohio (13)
 Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (2)
 Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY (2-7)
 Lewis Engineering Co 52 Rubber Ave Naugatuck Conn (13)
 Licon Switch & Control Div Illinois Tool Works 2501 N Keeler Ave Chicago 39 Ill (7)
 Line Electric Co 271 South Sixth St Newark 3 NJ (4)
 Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (10)
 Linemaster Switch Corp Woodstock Conn (4)
 Machinery Electrification Inc 56 Hudson St Northboro Mass (8)
 Magnetrol Inc 2110 S Marshall Blvd Chicago 23 Ill (3-8)
 Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind (13-14)
 Manning Maxwell & Moore Inc 250 E Main St Stratford Conn (8-11-12)
 McDonnell & Miller Inc 3500 N Spaulding Ave Chicago 18 Ill (3-8)
 Mercoid Corp 4201 W Belmont Ave Chicago 41 Ill (9)
 Micro Balancing Inc 191 Herricks Rd Garden City Park NY (10)
 Micro Switch Div of Minneapolis-Honeywell Regulator Co Chicago & Springfield Ill (4-7-9-12-13-15)
 Midwest Electric Products Inc 1515 N Front St Mankato Minn (14)
 Miller Harris Instrument Co 601 E Ogden Ave Milwaukee 2 Wis (14)
 Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (11-14)
 Monitor Controller Co 99 Grove St Rockland Mass (7)
 Mossman (Donald P) Inc Brewster NY (7)
 Nankervis (Geo L) Co 15300 Fullerton Ave Detroit 27 Mich (7)
 National Acme Co Electrical Mfg Div 170 E 131 St Cleveland 8 Ohio (7)
 National Time & Signal Corp 21800 Wyoming Ave Detroit 37 Mich (14)
 Noel Mfg Co 3 W 18 St New York 11 NY (2)
 Ohmite Mfg Co 3601 Howard St Skokie Ill (13)
 ●PARAGON ELECTRIC CO 1600 12th St Two Rivers Wis (14)—ADV PG 165
 Partlow Corp 230 Campion Rd New Hartford NY (7-10-14)
 Patrick & Wilkins Co 51 N Seventh St Phila 6 Pa (5-6)
 Penn Controls Inc Goshen Ind (3-8-11)
 Photobell Co Inc 43 Vesey St New York 7 NY (10)
 Photomation Inc 96 S Washington Ave Bergenfield NJ (10-15)
 Post Machinery Co Electronic Products Div 140 Elliott St Beverly Mass (14)
 Power Switch Co 36 Pleasant St Watertown Mass (9)
 Recora Co Inc Powis Rd (Box 68) St Charles Ill (4-5)
 ●RELiance AUTOMATIC LIGHTING CO 1927 Mead St Racine Wis (14)—ADV PG 162
 Reynolds Electric Co 3000 River Rd River Grove Ill (2)
 Rhodes (M H) Inc 30 Bartholomew Ave Hartford 6 Conn (14)
 Ripley Co Inc Factory St Middletown Conn (10-14)
 Robot Industries Inc 7041 Orchard St Dearborn Mich (5)
 Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (2)
 Roth Mfg Co 6420 W Howard St Chicago 31 Ill (10)
 Sangamo Electric Co 11th & Converse Springfield Ill (14)
 Sargent Electric Corp 630 Merrick Rd Lynbrook NY (7)
 Seely Instrument Co Inc 377 Fourth St (PO Box 387) Niagara Falls NY (14)
 Shalcross Mfg Co Preston St Selma North Carolina (7-13)
 Square D Co 6060 Rivard St Detroit 11 Mich (4-6-7-8-11-12-13-14)
 Standard Electric Time Co 89 Logan St Springfield 2 Mass (14)
 Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (2)
 Supreme Electric Products Co 194 Vassar St Rochester 7 NY (14)
 Technical Electronics Corp 4060 Ince Blvd Culver City Calif (14)
 Tigerman Engineering Co 4332 N Western Ave Chicago 18 Ill (9)
 Tork Time Controls Inc 1000 Grove St Mt Vernon NY (14)
 Unimax Switch Div W L Maxson Corp Ives Rd Wallingford Conn (4-7)
 U S Relay Co 717 N Coney Ave Azusa California (15)
 Vacuum Tube Products Co Inc 2020 Short St Oceanside Calif (14)
 Vernaline Products Co Box 222 Hawthorne New Jersey (4)
 Vibro Instruments Inc East Haddam Conn (2-3-8-11)
 Walser Automatic Timer Corp 420 Lexington Ave New York 17 NY (14)

Warrick (Chas F) Co 1964 W Eleven Mile Rd Berkley Mich (8)
 Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich (14)
 Westinghouse Electric Corp Standard Control Div Beaver Pa (7-8-11)
 Weston Instruments Div Of Dayton Inc 614 Frelinghuysen Ave Newark 12 NJ (11)
 White-Rodgers Co 1209 Cass Ave St Louis 6 Mo (7-11-12)
 Wilson (G C) & Co 1915 Eighth Ave Huntington W Va (14)
 Winterburn Mfg Co P O Box 386 Putnam Conn (3)
 Writrite Mfg Co 612-620 Colorado Ave Santa Monica Calif (4-7-11)
 Worner Electronic Devices Rankin Ill (10)
 ●ZENITH ELECTRIC CO 195 W Walton St Chicago 10 Ill (12-14)—ADV PG 168

33. EQUIPMENT SWITCHES & CONTROLS

1. Appliance switches
2. Battery switches & charging controls
3. Door & gate openers
4. Electric fence controllers
5. Electroplating controls
6. Generator controls
7. Heating system & temperature controls
8. Light dimmers
9. Street-lighting controls
10. Switch-operating mechanisms
11. Welder controls
12. Crane controls
13. Pump controls

Devices intended for use with specific items of equipment.

Acme Wire Co 1245 Dixwell Ave New Haven Conn (9)
 Acro Div Robertshaw-Fulton Controls Co 2040 East Main Street Columbus 16 Ohio (1)
 Air-Hydraulics of Indiana 7769 Lafayette Rd New Augusta Ind (11)
 Ajax Electric Co 954 Frankford Ave Phila 23 Pa (7)
 Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (7)
 Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio (3)
 Ark-Les Switch Corp 51 Water St Watertown Mass (1)
 Arrow-Hart & Hegeman Electric Co 103 Hawthorne St Hartford 6 Conn (1)
 Assembly Products Inc Chesterland 31 Ohio (7)
 Atlas Overhead Door Co Mill St at Reading Railroad Quakertown Pa (3)
 Automatic Control Co 995 University Ave St Paul 4 Minn (7-10)
 Automatic Devices Co Inc 714 Hillgrove Ave Western Springs Ill (7)
 Becker Bros Carbon Co 3450 S Laramie Ave Cicero 50 Ill (1)
 Berko Electric Mfg Corp 212-40 Jamaica Ave Queens Village 28 NY (7)
 Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn (1)
 Burling Instrument Co Inc 16 River Rd Chatham NJ (7)
 Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (8)
 Celheat Inc 5212 Homberg Drive Knoxville Tenn (7)
 Century Lighting Inc 521 W 43 St New York 36 NY (8)
 Circle F Mfg Co 720 Monmouth St Trenton 4 NJ (1-2)
 Cold Cathode Lighting Corp 42-40 27th St Long Island City NY (8)
 Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (5)
 Connecticut Electric Mfg Co Main St Bantam Conn (2)
 Controls Co of America 2450 N 32 St Milwaukee 45 Wisc (1-7-10)
 Counter & Control Corp 5225 W Electric Ave Milwaukee 19 Wisc (10)
 Crane (H W) Co 15 N 9th Ave Maywood Ill (3)
 Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (1-7-10-12)
 Day-Ray Products Inc 1133 Mission St South Pasadena Calif (8)
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (10)
 Detroit Controls Div American-Standard 5900 Trumbull Ave Detroit 8 Mich (1-7)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1)
 Edco International Corp 20722 W Seven Mile Rd Detroit 19 Mich (1)
 Ebert Electronics Corp 212-26 Jamaica Ave Queens Village 28 L I NY (9)
 Ederer Engineering Co 2943 1st Ave S Seattle 4 Wash (12)
 Edwards Co Inc Norwalk Conn (3)
 Electric Service Systems Inc 1330 Quincy St N E Minneapolis 13 Minn (4)
 Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (6)
 Electric Power Door Co 2127 E Lake St Minneapolis 7 Minn (3)
 Electric Steam Radiator Corp 1 Electric Ave Paris Ky (7)
 Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich (3)

Electronics Corp of America One Memorial Dr Cambridge Mass (3-9)
 Electrovector Inc 475 Flushing Ave Brooklyn 5 NY (7)
 Engelhard (Charles) Inc 850 Passaic Ave East Newark NJ (7)
 Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa (2)
 Federal Pacific Electric Co 50 Paris St Newark 5 NJ (1)
 Fenwal Inc Pleasant St Ashland Mass (7)
 Fisher-Pierce Co 170 Pearl St South Braintree 85 Mass (9)
 Friez Instrument Div Bendix Aviation Corp Baltimore 4 Md (7)
 General Controls Co 801 Allen Ave Glendale Calif (7)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (5-6-7-9-10-11)
 General Electric Co Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn (2)
 General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1-7)
 Guardian Electric Mfg Co 1621 W Walnut St Chicago 12 Ill (1)
 H-B Instrument Co 4303 American St Phila 40 Pa (7)
 Hanksraft Co Control Div Reedsburg Wis (7)
 Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (12)
 Hart Mfg Co 164 Bartholomew Ave Hartford Conn (7)
 Howell Mfg Co 21 N Morehall Rd Paoli Pa (3)
 Hubbell (Harvey) Inc State St & Bostwick Ave Bridgeport 2 Conn (1-2)
 Ideal Electric and Mfg Co East First St Mansfield Ohio (6)
 Illinois Testing Laboratories Inc 420 N LaSalle St Chicago 10 Ill (7)
 International Electric Fence Co Inc Box 650 Albert Lea Minn (4)
 Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (9)
 Kato Engineering Co 1442 First Ave Mankato Minn (6)
 Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (2)
 Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (8)
 Lake Shore Electric Corp 205 Willis St Bedford Ohio (6)
 Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY (1-2)
 Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio (11)
 Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (9)
 Magnetrol Inc 2110 S Marshall Blvd Chicago 23 Ill (13)
 Marquette Electric Switchboard Co 311 N Desplaines St Chicago 6 Ill (6)
 Marsh (Jas P) Corp 3501 Howard St Skokie Ill (7)
 McCorkle (D H) Co Box 97 Station A Berkeley Calif (7)
 McLarty Systems 2600 Dickman Rd Battle Creek Mich (7)
 Mechanical Industries Production Co 217-223 Ash St Akron 8 Ohio (7)
 Memco Engineering & Mfg Co Inc Commack L I NY (10)
 Mercold Corp 4201 W Belmont Ave Chicago 41 Ill (7)
 Micro Balancing Inc 191 Herricks Rd Garden City Pk NY (9)
 Micro Switch Div of Minneapolis-Honeywell Regulator Co Chicago & Springfield Ill (1)
 Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (7-8)
 Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Phila 44 Pa (7)
 Palmer Electric & Mfg Co 24 Water St Wakefield Mass (7)
 Pass & Seymour Inc Syracuse 9 NY (1)
 Penn Controls Inc Goshen Ind (7)
 Photobell Co Inc 43 Vesey St New York 7 NY (9)
 Precision Thermometer & Instrument Co 1434 Brandywine St Philadelphia 30 Pa (7)
 Pyramid Instrument Corp 630 Merrick Rd Lynbrook NY (7)
 Quincy Mfg Co Box 916 Tiffin Ohio (3)
 Richards-Wilcox Mfg Co 150 Third St Aurora Ill (3)
 Rhodes (M H) Inc 30 Bartholomew Ave Hartford 6 Conn (1)
 Riple Co Inc Factory St Middletown Conn (9)
 Roberson Inc 1539 E 103 St Seattle 55 Wash (7)
 Robot Industries Inc 7041 Orchard St Dearborn Mich (3)
 Robotron Corp 21300 W Eight Mile Rd Detroit 19 Mich (11)
 Roth Mfg Co 6420 W Howard St Chicago 31 Ill (9)
 Sargent Electric Corp 630 Merrick Rd Lynbrook NY (1)
 Shaw-Stok Inc Wellington Ohio (4)
 Signet Controls 3205 S E 13th Ave Portland 2 Ore (7)
 Simplex Co Inc 1139-41 N MacArthur Blvd Springfield Ill (6)
 Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY (1)
 Smith-Gates Corp Farmington Conn (7)

Square D Co 6060 Rivard St Detroit 11 Mich (8)
 Stackpole Carbon Co Stackpole St St Marys Pa (1)
 Superior Electric Co 83 Laurel St Bristol Conn (8)
 Taylor-Winfield Corp 1052 Mahoning Ave Warren Ohio (11)
 Tocco Div Ohio Crankshaft Co 3800 Harvard Ave Cleveland 5 Ohio (6)
 Trine Mfg Corp 1430 Ferris Pl New York 61 NY (3)
 Ulanet (George) Co 413-15 Market St Newark 8 NJ (7)
 United Electric Controls Co 85 School St Watertown 72 Mass (7)
 Vacuum Tube Products Co Inc 2020 Short St Oceanside Calif (11)
 Ward Leonard Electric Co 28 South St Mount Vernon NY (8)
 Welsler Instrument Corp 195 E Merrick Rd Freeport L I NY (7)
 Welcraft Products Co Inc New Carlisle Ind (7)
 Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich (6-11)
 Wesix Electric Heater Co 390 First St San Francisco 5 Calif (7)
 West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill (7)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (7-9)
 White-Rodgers Co 1209 Cass Ave St Louis 6 Mo (7)
 Worner Electronic Devices Rankin Ill (9)
 Yardney Electric Corp 40-50 Leonard St New York 13 NY (7)

3K. SPECIAL-FUNCTION CONTROLS

1. Field-discharge switches
2. Frequency controls
3. Interlocks & electric locks
4. Magnetic amplifiers
5. Program clock systems
6. Saturable reactors
7. Servo components
8. Solenoids
9. Static controls
10. Electric brakes & clutches
11. Valves (electrically operated)
12. Carrier system controls
13. Machine & process controls
14. Permanent magnets
15. Peak load controls
16. Electromagnets
17. Central industrial control systems
18. Flame safeguard equipment

Devices intended to accomplish specialized control functions.

Acme Electric Corp 36 Water St Cuba NY (6)
 Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (8)
 Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (2)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2-4-6-7-9-11)
 American Rectifier Corp 95 Lafayette St NY 13 NY (10)
 Atkomatic Valve Co Inc 545 W Abbott St Indianapolis Ind (11)
 Asht Electric Co Inc 34-20 45th St LIC 1 NY (5)
 Automatic Control Co 995 University Ave St Paul 4 Minn (2-5-7)
 Automatic Devices Co Inc 714 Hillgrove Ave Western Springs Ill (5)
 Automatic Switch Co 50-56 Hanover Rd Florham Pk NJ (1-8-11)
 Avion Div ACF Industries Inc 11 Park Pl Paramus NJ (4-6-7)
 B/W Controller Corp 2200 E Maple Rd Birmingham Mich (8)
 Barkelew Electric Mfg Co 1905 Columbia Ave Middletown Ohio (1)
 Barksdale Valves 5125 Alcoa Ave Los Angeles 58 Calif (11)
 Berkshire Transformer Corp Kent Conn (6)
 Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (4-7)
 Bush Transformer Corp 707 North St Endicott NY (6)
 Caltron Products Co 3518 W Pico Blvd Los Angeles 19 Calif (8-11)
 Central Transformer Co 900 W Jackson Blvd Chicago 7 Ill (6)
 ●CINCINNATI TIME RECORDER CO 1733 Central Ave Cincinnati 14 Ohio (5)—ADV PG 137
 Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (11-13)
 Clark-Cooper Co Inc 317 N Market St Palmyra W J (11)
 Comar Electric Co 3349 W Addison Chicago 18 Ill (8)
 Controls Co of America 2450 N 32 St Milwaukee 45 Wisc (8-11)
 Crittenden Transformer Works Inc 13011 S Spring St Los Angeles 61 Calif (6)
 Crucible Steel Co of America Oliver Bldg Mellon St Pittsburgh 22 Pa (14)
 Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (3-4-5-8-10-11)
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (3)
 Detroit Controls Div American-Standard 5900 Trumbull Ave Detroit 8 Mich (11)

DeWalt Div American Machine & Foundry Co
Fountain Ave Lancaster Pa (10)
Dings Brakes Inc 4740 W Electric Ave Milwaukee 46 Wis (10)
Djeco Div Djordjevic Engineering Co 1933 N
Damen Ave Chicago 47 Ill (4-6)
Dormeyer Industries 3418 Milwaukee Ave Chicago
41 Ill (6-8)
Dossert Mfg Corp 249-255 Huron St Brooklyn
22 NY (3)
Edwards Co Inc Norwalk Conn (5)
Electran Mfg Co 1901 Clybourn Ave Chicago
14 Ill (6)
Electric Regulator Corp Norwalk Conn (2-9)
Electrical Windings Inc 2015 N Kolmar Ave
Chicago 39 Ill (6)
Electro Engineering Works 401 Preda St San
Leandro Calif (6)
Electronics Corp of America One Memorial Dr
Cambridge Mass (3)
Electrosnap Corp Switch Div 4218-30 W Lake
St Chicago 24 Ill (3)
Esco Mfg Co P O Box 1039 Greenville Tex (6)
Federal Sign & Signal Corp 13626 S Western Ave
Blue Island Ill (5)
Femco Inc Irwin Pa (13)
Fischer & Porter Co 335 Warminster Rd Hatboro
Pa (11)
Gemco Electric Co 25685 W Eight Mile Rd
Detroit 40 Mich (4-6-7)
General Controls Co 801 Allen Ave Glendale
Calif (8-11)
General Electric Co Apparatus Sales Div Sche-
nectady 5 NY (6)
General Hardware Mfg Co Inc 80 White St New
York 13 NY (14)
Guardian Electric Mfg Co 1621 W Walnut St
Chicago 12 Ill (8-11)
Hanksraft Co Control Div Reedsburg Wis (15)
Harnischfeger Corp 4400 W National Ave Mil-
waukee 46 Wis (10)
Hays Mfg Co Industrial Sales Div 12th and Liberty
Sts Erie 6 Pa (3-8-11)
Hevi Duty Electric Co P O Box 563 Milwaukee 1
Wis (6)
Hewson Co Inc 443 Broad St Newark 2 New
Jersey (9)
I-T-E Circuit Breaker Co Greensburg Div P O Box
98 Greensburg Pa (3)
Induction Motors Corp 570 Main St Westbury NY
(7)
International Business Machines Corp Times Equip-
ment Div 590 Madison Ave New York 22 NY
(5-12)
International Register Co 2620 W Washington Blvd
Chicago 12 Ill (5)
Leeds & Northrup Co 4970 Stenton Ave Phila 44
Pa (2-6)
Leland (G H) Inc 123 Webster St Dayton 2 Ohio
(8)
Lindberg Engineering Co 2450 W Hubbard St Chi-
cago 12 Ill (6)
Magnatrol Valve Corp 67 Fifth Ave Hawthorne
NJ (11)
Magnetics Inc Box EPG Butler Pa (4-6-9)
Manning Maxwell & Moore Inc 250 E Main St
Stratford Conn (11)
Max-A-Loc Inc El Monte Calif (3)
Merco Corp 4201 W Belmont Ave Chicago 41
Ill (11)
Minneapolis-Honeywell Regulator Co 2753 Fourth
Ave S Minneapolis 8 Minn (5)
Minneapolis-Honeywell Regulator Co Industrial Div
Wayne & Windrim Aves Phila 44 Pa (2-7-11-
13-17-18)
Monitor Controller Co 99 Grove St Rockland Mass
(8)
National Acme Co Electrical Mfg Div 170 E 131
St Cleveland 8 Ohio (8)
National Time & Signal Corp 21800 Wyoming Ave
Detroit 37 Mich (5)
Naylor (E V) Laboratories Inc 26 Manorhaven Blvd
Port Washington NY (8)
Nothelmer Winding Labs Inc 5 Albemarle Ave (P O
Box 455) Trenton 3 NJ (6)
Olinco Co 1579 W Pierce St Milwaukee 4 Wis
(7)
Panellit Inc 7401 N Hamilton Ave Skokie Illinois
(17)
Protection Controls Inc 6000 N Legett Ave Chi-
cago 46 Ill (13)
R & IE Equipment Div I-T-E Circuit Breaker Co
Greensburg Pa (3)
Raytheon Mfg Co Commercial Equipment Div 100
River St Waltham 54 Mass (4)
Refrigerating Specialties Co 3004 W Lexington St
Chicago 12 Ill (11)
Reliance Electric & Engineering Co 24701 Euclid
Ave Cleveland 17 Ohio (4-7)
Reuland Electric Co 3001 W Mission Rd Alhambra
Calif (10)
Richardson-Allen Corp 116-15 Fifteenth Ave Col-
lege Point LI NY (6)
Ruggles-Klingemann Mfg Co Foster Court Salem
Mass (11)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY
(3)
Shrader (FW) Co 11623 S Broadway Los Angeles
61 Calif (14-16)
Simplex Time Recorder Co 24 S Lincoln St Gardner
Mass (5)
Skinner Chuck Co Skinner Electric Valve Div 95
Edgewood Ave New Britain Conn (11)
●SORGEL ELECTRIC CO 8388 W National Ave Mil-
waukee 4 Wis (6)—ADV PG 155
Southwestern Industrial Electronics Co 2831 Post
Oak Rd (P O Box 13058) Houston 19 Tex (4-6)
Spertl Faraday Inc 1322 E Church St Adrian
Mich (5)

Square D Co 6060 Rivard St Detroit 11 Mich
(11)
Stackpole Carbon Co Stackpole St St Marys Pa
(14)
Standard Electric Time Co 89 Logan St Spring-
field 2 Mass (5)
Stearns Electric Corp 120 N Broadway Milwaukee
2 Wis (10)
Stonite Coil Corp U S Hwy 130 Yardville New
Jersey (8)
Stromberg Time Corp 135 S Main St Thomaston
Conn (5)
Superior Electric Co 83 Laurel St Bristol Conn
(4)
Superior Interlock Corp 73-39 Central Ave Glen-
dale 27 NY (3)
Supreme Electric Products Co 194 Vassar St
Rochester 7 NY (11)
Taylor-Winfield Corp 1052 Mahoning Ave Warren
Ohio (11)
Trio Laboratories Inc Expressway Industrial Park
Plainview NY (3)
●TROMBETTA SOLENOID CORP 329 N Milwaukee
St Milwaukee 2 Wis (8-10)—ADV PG 166
Turbo Machine Co Lansdale Pa (13)
United States Electronics Corp 275 Warren St
Lynchburg NJ (8)
U S Relay Co 717 N Coney Ave Azusa Calif (8)
United Transformer Co 150 Varick St New York 13
NY (6)
Versabar Corp 14 Whyte St Jersey City New
Jersey (10)
Vickers Inc Electric Products Div 1847 Locust
St St Louis 3 Mo (4)
Viking Instruments Inc East Haddam Connecticut
(11)
Warner Electric Brake & Clutch Co Beloit Wisc
(10)
Weltronic Co 19500 W Eight Mile Rd Detroit 41
Mich (2-3)
Westinghouse Electric Corp P O Box 868 Pitts-
burgh 30 Pa (3-4-8)
White-Rodgers Co 1209 Cass Ave St Louis 6 Mo
(11)
Wisconsin Electrical Mfg Co Inc 1237 S Third St
Milwaukee 4 Wis (13)
Zenith Electric Co 155 W Walton St Chicago 10
Ill (5)

31. LOW-VOLTAGE CONTROL SYSTEMS

Low-voltage relays, switches and power
sources for control of lighting and appliance
loads from multiple locations.

Bryant Electric Co 1421 State St (Box D Barnum
St) Bridgeport 2 Conn
General Electric Co Wiring Device Dept 95 Hatha-
way St Providence RI
Pyramid Instrument Corp Remcon Div 630 Mer-
rick Rd Lynbrook NY
Square D Co 6060 Rivard St Detroit 11 Mich
Touch-Plate Mfg Corp Box 1970 Long Beach Calif

32. MOTOR CONTROLS

1. Disconnect switches
2. Drum switches & controllers
3. Magnetic contactors
4. Magnetic starters
5. Manual starters
6. Pushbutton stations
7. Speed regulators & controls
8. Motor control centers

Starting, stopping and control equipment for
motor circuits.

Adam (Frank) Electric Co 3647 Windsor Pl St
Louis Mo (1)
Allen-Bradley Co 136 W Greenfield Ave Milwaukee
4 Wis (2-3-4-5-6-7)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee
1 Wis (2-3-4-5-6-7)
American Electric Switch Div Clark Controller Co
1146 E 152 St Cleveland 10 Ohio (1)
American Rectifier Corp 95 Lafayette St NY 13
NY (7)
Appleton Electric Co 1701-59 Wellington Ave
Chicago 13 Ill (1-3)
Arrow-Hart & Hegeman Electric Co 103 Hawthorn
St Hartford 6 Conn (1-2-3-4-5-6)
Automatic Switch Co 50-56 Hanover Rd Florham
Pk NJ (3)
B/W Controller Corp 2200 E Maple Rd Birming-
ham Mich (3-4)
Boque Electric Mfg Co 52 Iowa Ave Paterson 3
NJ (7)
Bryant Electric Co 1421 State St (Box D
Barnum St) Bridgeport 2 Conn (5)
Bulldog Electric Products Div I-T-E Circuit Breaker
Co 7610 Joseph Campus Detroit Mich (1)
Clark Controller Co 1146 E 152 St Cleveland 10
Ohio (2-3-4-5-6-7)
Continental Electric Equipment Co Box 1055 Cin-
cinnati 1 Ohio (8)
Crouse-Hinds Co Syracuse 1 NY (3-4-5-6)
Curtis Development & Mfg Co 3244 N 33 St
Milwaukee 16 Wis (7)

●CUTLER-HAMMER INC 228 N 12th St Milwaukee
1 Wis (1 thru 8)—ADV PG 96
Delco Products Div General Motors Corp 329 E
1st St Dayton 1 Ohio (4)
Delta-Star Electric Div H K Porter Co Inc 2437
Fulton St Chicago 12 Ill (1)
Electric Controller & Mfg Co 4493 Lee Rd Cleve-
land 28 Ohio (3-4)
Electric Distribution Products Inc 2200 31st St
S W Allentown Pa (8)
Electric Machinery Mfg Co 800 Central Ave Minne-
apolis 13 Minn (4-7)
Electric Regulator Corp Norwalk Conn (7)
Eliza Metal Products Co Box 408 Bridgeville
Pa (6)
Euclid Electric & Mfg Co 50 Edwards St Madison
Ohio (2-3-4-6)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St
Newark 5 New Jersey (2-3-4-5-6)—ADV PG
90-91
Furnas Electric Co 1067 McKee St Batavia Ill
(2-3-4-6)
Furnas Electric Co 1067 McKee St Batavia Ill
(5)
Gemco Electric Co 25685 W Eight Mile Rd Det-
roit 40 Mich (4-6-7)
General Controls Co 801 Allen Ave Glendale Calif
(3-4)
●GENERAL ELECTRIC CO Distribution Assemblies
Dept 41 Woodford Ave Plainville Conn (1 thru
7)—ADV PG 100-101
General Electric Co Circuit Protective Devices Dept
41 Woodford Ave Plainville Conn (8)
General Electric Co Distribution Assemblies Dept
41 Woodford Ave Plainville Conn (8)
General Switch Co 45 Roebing St Brooklyn 11
NY (1)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave
NY 17 NY (1 thru 7)—ADV PG 4
Guyan Machinery Co Inc Box 150 Logan W Va
(4)
I-T-E Circuit Breaker Co 1900 Hamilton St Phila-
delphia 30 Pa (1)
Ideal Electric and Mfg Co East First St Mans-
field Ohio (2-4-5)
Killark Electric Mfg Co 3940 Easton Ave St
Louis 13 Mo (1-3-4-5-6)
Kirkwood Commutator Corp 4855 W 130 St Cleve-
land 35 Ohio (5)
Kolton Electric Mfg Co 123 New Jersey Railroad
Ave Newark 5 NJ (1)
Lindell Electric Control Corp 384 Canal St New
York 13 NY (2)
Luminate Electronic Corp 407 S Dearborn St Chi-
cago 5 Ill (3-4)
Machinery Electrification Inc 56 Hudson St North-
boro Mass (7)
Minneapolis-Honeywell Regulator Co 2753 Fourth
Ave S Minneapolis 8 Minn (6)
Monitor Controller Co 99 Grove St Rockland
Mass (1-3-4-5-6)
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16
NY (1)
National Acme Co Electrical Mfg Div 170 E 131
St Cleveland 8 Ohio (5-6)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla
(3-4-6-8)
Opad Electric Co 43 Walker St New York 13 NY
(7)
Palmer Electric & Mfg Co 24 Water St Wakefield
Mass (1)
Pennsylvania Transformer Div McGraw-Edison Co
Box 330 Canonsburg Pa (1)
Pyle-National Co 1344 N Kostner Ave Chicago 51
Ill (1-4-6)
R-B-M Div Essex Wire Corp 131 Godfrey St
Logansport Ind (3-4)
Reliance Electric & Engineering Co 24701 Euclid
Ave Cleveland 17 Ohio (7)
Richards-Wilcox Mfg Co 150 Third St Aurora Ill
(6)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY
(1-4-5-6)
Servospeed Div Electro Devices Inc 4 Godwin Ave
Paterson NJ (7)
Square D Co 6060 Rivard St Detroit 11 Mich
(1 thru 7)
Struthers-Dunn Inc Pitman NJ (4)
System Analyzer Corp 700 W State St Nokomis
Ill (3)
V V Fitting Co 711 Cherry St Philadelphia 6
Pennsylvania (1)
Vickers Inc Electric Products Div 1847 Locust St
St Louis 3 Mo (7)
Wac Line Inc 35 S St Clair St Dayton 2 Ohio (7)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St
(Box 272) Covington Ky (1)
●WAGNER ELECTRIC CORP 6400 Plymouth Ave
St Louis 14 Mo (4)—ADV PG 143
Ward Leonard Electric Co 28 South St Mount
Vernon NY (3-4-6-7)
Weltronic Co 19500 W Eight Mile Rd Detroit 41
Mich (7)
●WESTINGHOUSE ELECTRIC CORP P O Box 868
Pittsburgh 30 Pa (1 thru 7)—ADV PG 71-72-73-
74
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway
Center (Box 448) Pittsburgh 30 Pa (1 thru 7)—
ADV PG 2nd COVER
Winterburn Mfg Co P O Box 386 Putnam Conn-
necticut (7)
Worner Electronic Devices Rankin Ill (6)
●ZENITH ELECTRIC CO 155 W Walton St Chicago
10 Ill (3-4)—ADV PG 168
Zinsco Electrical Products 729 Turner Los Angeles
12 Calif (8)

3N. RELAYS

1. General purpose
2. Protective
3. Timing & time delay
4. Rotary

General purpose relays include magnetic and mechanical relays of held types for remote switching of electrical circuits. Protective relays include overload, thermal, under-voltage, phase rotation, etc., relays.

A G A Div Elastic Stop Nut Corp of America 1027 Newark Ave Elizabeth NJ (3)
 Abrams Instrument Corp 606 E. Shawnee St Lansing Mich (3)
 Aemco Inc 10 State St Mankato Minn (1)
 Airserco Mfg Co Inc 435 Melwood St Pittsburgh 13 Pa (1)
 Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (1-2-3)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2-3)
 Amperite Co Inc 561 Broadway NY 12 NY (3)
 Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (1)
 Autocall Co 58 Warden Ave Shelby Ohio (1)
 Automatic Electric Co Northlake Ill (1-3)
 Automatic Switch Co 50-56 Hanover Rd Flushing Pk NY (1-2-3)
 B/W Controller Corp 2200 E Maple Rd Birmingham Mich (2)
 Baker Perkins Inc Saginaw Mich (2)
 Bristol Motor Div Vocaine Co of America Inc Coulter St Old Saybrook Conn (3)
 Clare (C P) & Co 3101 Pratt Blvd Chicago 45 Ill (1)
 Clark Controller Co 146 E 152 St Cleveland 10 Ohio (1-2-3)
 Comar Electric Co 3349 W Addison Chicago 18 Ill (1)
 Cramer Controls Corp Main St Centerbrook Conn (3)
 Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (1-2-3)
 Ebert Electronics Corp 212-26 Jamaica Ave Queens Village 28 LI NY (1)
 Elgin National Watch Co Electronics Div 2435 N Naomi St Burbank Calif (1-4)
 Esco Mfg Co P O Box 1039 Greenville Tex (2)
 Euclid Electric Mfg Co 50 Edwards St Madison Ohio (1-3)
 Farmer Electric Products Co Inc 2300 Washington St Newton Lower Falls 62 Mass (1)
 Federal Pacific Electric Co 50 Paris St Newark 5 NJ (2)
 Ferrara Inc 8106 W Nine Mile Rd Oak Park 37 Mich (3)
 General Controls Co 801 Allen Ave Glendale Calif (1)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (1-2-3)
 Guardian Electric Mfg Co 1621 W Walnut St Chicago 12 Ill (1)
 H-B Instrument Co 4303 American St Phila 40 Pa (1)
 Haledy Electronics Co 57 William St NY 5 NY (1)
 Hanksraft Co Control Div Reedsburg Wis (1)
 Haydon (A W) Co 232 N Elm St Waterbury Conn (3)
 Haydon Div General Time Corp 245 E Elm St Torrington Conn (3)
 Heinemann Electric Co Pennsylvania Ave & Plum St Trenton 2 NJ (2-3)
 Iron Fireman Mfg Co Electronics Div 2038 S E 9th Ave Portland 2 Ore (1)
 Jordan Electronics 3025 W Mission Rd Alhambra Calif (3)
 Kurman Electric Co 191-193 Newel St Brooklyn 22 NY (1-2-3)
 Leland (G H) Inc 123 Webster St Dayton 2 Ohio (4)
 ●LEWIS ELECTRIC CO 1254 W Harrison St Chicago 7 Ill (1)—ADV PG 158
 Line Electric Co 271 South Sixth St Newark 3 NJ (3)
 Luminate Electronic Corp 407 S Dearborn St Chicago 5 Ill (3)
 Machinery Electrification Inc 56 Hudson St Northboro Mass (2-3)
 Mercoind Corp 4201 W Belmont Ave Chicago 41 Ill (1)
 Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (1-3)
 Naylor (E V) Laboratories Inc 26 Manorhaven Blvd Port Washington NY (1-3)
 Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (3)
 Ohmite Mfg Co 3601 Howard St Skokie Ill (1-2)
 Palmer Electric & Mfg Co 24 Water St Wakefield Mass (1)
 Partridge & Wilkins Co 51 N Seventh St Phila 6 Pa (1)
 Penn Controls Inc Goshen Ind (1)
 Phillips Control Corp 59 W Washington St Joliet Ill (1)
 Pollak (Joseph) Corp 81-95 Freeport St Boston 22 Mass (1)
 Potter & Brumfield Div American Machine and Foundry Co Princeton Ind (1)
 Price Electric Corp East Church & Second Sts Frederick Md (1)
 R-B-M Div Essex Wire Corp 131 Godfrey St Logansport Ind (1)

Rhodes (M H) Inc 30 Bartholomew Ave Hartford 6 Conn (3)
 Square D Co 6060 Rivard St Detroit 11 Mich (1-2-3)
 Standard Electric Products Co 2240 Third St Dayton 3 Ohio (1-2-3)
 Stradley Engineering Co P O Box 6006 Pittsburgh 11 Pa (2)
 Struthers-Dunn Inc Pitman NJ (1-3)
 Sylvania Electric Products Inc 1740 Broadway NY 19 NY (3)
 Taitco Div Tait Mfg Co 500 Webster St Dayton 1 Ohio (1)
 Teraco Co 1069 Raymond Ave St Paul 14 Minn (1)
 Touch-Plate Mfg Corp Box 1970 Long Beach Calif (1)
 Ulanet (George) Co 413-15 Market St Newark 5 NJ (3)
 U S Relay Co 717 N Coney Ave Azusa Calif (1-2-3)
 Ward Leonard Electric Co 28 South St Mount Vernon NY (1)
 West Electric Heater Co 390 First St San Francisco 5 Calif (1)
 Westinghouse Electric Corp Standard Control Div Beaver Pa (1-2-3)
 Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3)
 Weston Instruments Div of Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ (1)
 White-Rodgers Co 1209 Cass Ave St Louis 6 Mo (1)
 Wilson (G C) & Co 1915 Eighth Ave Huntington W Va (3)
 Zenith Electric Co 155 W Walton St Chicago 10 Ill (3)

3P. SYSTEM REGULATING EQUIPMENT

1. Capacitors
2. Rheostats
3. Voltage regulators
4. Load resistors
5. Variators
6. Thermistors

Capacitors are for power factor control; resistances & rheostats are for control of voltage & current in circuits to motors, elevators, plating equipment, etc.; voltage regulators control voltage of transmission lines, feeders or specific utilization equipment. Variators are voltage-sensitive resistors; thermistors are thermally sensitive resistors.

Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (2)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (3)
 American Rectifier Corp 95 Lafayette St New York 13 NY (2-3)
 Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (3)
 Central Transformer Co 900 W Jackson Blvd Chicago 7 Ill (3)
 Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (2)
 Continental Carbon Div of Wirt Co 5221 Greene St Philadelphia 44 Pa (2)
 Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (2)
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (3)
 Electronic Measurements Co Inc Lewis St & Maple Ave Eatontown NJ (3)
 Everett (EA) Inc 33-15 56th St Woodside 77 NY (2)
 Exmet Electrical Corp 127 Marblehead Road P O Box 485 Tuckahoe NY (2)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (1-2-3-6)
 Girard-Hopkins 1000 40th Ave Oakland 1 Calif (1)
 Globar Div Carborundum Co Niagara Falls NY (4-5-6)
 Guyan Machinery Co Inc Box 150 Logan W Va (2)
 Lake Shore Electric Corp 205 Willis St Bedford Ohio (3)
 Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-3)
 Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind (2)
 National Electric Controller Co 7070 Glenwood Ave Chicago 26 Ill (2)
 Ohio Brass Co 380 N Main St Mansfield Ohio (1)
 Ohmite Mfg Co 3601 Howard St Skokie Ill (2)
 Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa (3)
 Sangamo Electric Co 11th & Converse Springfield Ill (1)
 Sorensen & Co Inc Richards Ave South Norwalk Conn (3)
 Sprague Electric Co North Adams Mass (1)
 Superior Electric Co 83 Laurel St Bristol Conn (2-3)
 Tobe Deutschmann Corp Providence Highway Norwood Mass (1)
 Ward Leonard Electric Co 28 South St Mount Vernon NY (2)
 Weltron Co 19500 W Eight Mile Rd Detroit 41 Mich (3)

●WESTINGHOUSE ELECTRIC CORP P O Box 868 Pittsburgh 30 Pa (1-2-3)—ADV PG 71-72-73-74
 Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

Code No.	Description, Pages Catalog No. & Mfr.
3-1	Relays, Timers & Flashers; 27p (Aemco)
3-2	Automatic Control with Contact Meter-Relays; 36p; Cat. No. 4F (Assembly Products)
3-2	Solenoid Valves; 35p; Cat. No. 444 (Atko-matic)
3-4	Relays for Industry; 10p (Automatic Electric)
3-5	Industrial and Motor Controls; 12p (B/W)
3-6	Floatless Liquid Level Controls; 16p (B/W)
3-7	Bin Level Indicators for Bulk Materials; 20p (Bin-Dicator)
3-8	Phototubes and Photocells; 12p; Cat. No. E-290P (CBS)
3-9	Master Time and Program Signaling; 22p (Cincinnati)
3-10	Pressure and Vacuum Controls; 23p (Coral Designs)
3-11	Timing Devices; 18p; Cat. No. PB-1000 (Cramer)
3-12	Fusible Entrance Equipment; 12p; Cat. No. ED-50 (Cutler-Hammer)
3-13	High Precision Potentiometers; 27p; Cat. No. POT 359 (DeJur-Amsco)
3-14	Wide Range Motor Speed Control; 8p; (Electro Devices)
3-15	Motor Control Centers; 24p; Cat. No. UM-100 (Electric Distribution)
3-16	Uni-Bus Masterguard Distribution System; 28p (Electric Distribution)
3-17	Basic Snap-Action Switches; 48p; Cat. No. ES 59 (Electronap)
3-18	Time Cycle Controllers; 16p; Cat. No. 459 (Electric Switch)
3-19	Fusible Service Equipment; Cat. No. 1-215A; 16p (Federal Pacific)
3-20	Metal-Clad Switchgear; Cat. No. 3-440; 61p (Federal Pacific)
3-21	Manual Starters; 8p; Cat. No. 11-B1A (Fermas)
3-22	Distribution Switchboard, Type DR; 32p; Cat. No. GE-6627 (G-E)
3-23	Industrial Voltage Regulators; 58p; Cat. No. GEC-1450A (G-E)
3-24	Packaged Tranfo-Units; 16p (I-T-E)
3-25	Power Switching Centers; 20p; Cat. No. 1616A (I-T-E)
3-26	Secondary Unit Substations; 24p; Cat. No. 3104-1A (I-T-E)
3-27	4160-Volt Metal-Clad Switchgear; 22p; Cat. No. 2804-1A; (I-T-E)
3-28	Hook-Operated Disconnect Switches; Cat. No. PSEB (Line Material)
3-29	Control Standard Switching Reactors; 14p; Cat. No. S-10 (Magnetics)
3-30	Control Standard Reactors; 34p; Cat. No. R-10 (Magnetics)
3-31	Elektronik Controllers; 56p; Cat. No. C 15-2 (Minneapolis-Honeywell)
3-32	Flame Safeguards; 42p; Cat. No. C-101-2 (Minneapolis-Honeywell)

- 3-33 Industrial Controls; 84p; Cat. No. 101-1a (Minneapolis-Honeywell)
- 3-34 Pyrometer Supplies; 50p; Cat. No. G100-8 (Minneapolis-Honeywell)
- 3-35 Electrical Distribution Equipment; 66p; Cat. No. 60 (Murray)
- 3-36 High Voltage Fused Motor Starter; 8p (Nelson)
- 3-37 Operators for Gates; 12p; Cat. No. A-240 (Richards-Wilcox)
- 3-38 Remote Controls for Door and Gate Operators; 12p; Cat. No. A-260 (Richards-Wilcox)

- 3-39 Electro and Permanent Magnets; 40p (Shrader)
- 3-40 Complete Relay Service; 32p; Cat. No. JS-D (Struthers-Dunn)
- 3-41 Luxtrol Light Controls; Cat. No. L75BW; 20p (Superior Electric)
- 3-42 Lighting Control; 8p; Cat. No. 5436-1 (Vickers)
- 3-43 Safety Switches, Service Equipment and Panels; 58 Guide; 16p (Wadsworth)
- 3-44 Sensitive Relays; 8p; Cat. No. 02-100-A (Weston)

- 3-45 Controls; 8p; Cat. No. 100.000 (Ward Leonard)
- 3-46 Controllet Lighting Control; 8p; Cat. No. 76p; (Ward Leonard)
- 3-47 Automatic Controls for Heating, Air Conditioning and Refrigeration; 56p (White-Rodgers)
- 3-48 Power Distribution Equipment; 24p; Cat. No. 106-A (Zinsco)
- 3-49 Uni-form'd Service & Distribution Equipment; 30p; Cat. No. 102-A (Zinsco)

SECTION 4. PROTECTIVE DEVICES

4A. FUSE CUTOUTS & LINKS

For high-voltage distribution lines.

- Chance (A B) Co 210 North Allen St Centraill Mo
- G & W ELECTRIC SPECIALTY CO 3500 W 127 St Blue Island Ill—ADV PG 99
- General Electric Co Apparatus Sales Div Schenectady 5 NY
- Hubbard & Co 6301 Butler St Pittsburgh 1 Pa
- Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill
- Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo
- Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis
- S & C Electric Co 4435 Ravenswood Ave Chicago 40 Ill
- USCO Power Equipment Corp 829 N 36th Way Birmingham 4 Ala
- Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa

4B. FUSES

1. Cartridge
2. Current-limiting
3. Glass tube
4. Open link
5. Plug

Cartridge, plug and open-link fuses are for feeder and branch circuit distribution overload protection; glass tube fuses protect individual devices or instruments; current-limiting fuses limit system short-circuit currents to safe values.

- Bussmann Mfg Div McGraw-Edison Co University at Jefferson St Louis 7 Mo (1-2-3-4-5)
- Cable Electric Products Inc 234 Daboll St Providence 7 RI (1-5)
- Chase-Shawmut Co 374 Merrimac St Newburyport Mass (1-5)
- Commercial Enclosed Fuse Co of NJ 6812 Polk St Guttenberg NJ (1-3-5)
- Dependable-Electric Mfg Co Inc 537 Johnson Ave Brooklyn 37 NY (5)
- Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1-3-5)
- Economy Fuse Div Federal Pacific Electric Co 2717 N Greenview Ave Chicago 14 Ill (1-5)
- Excel Fuse Co 117 W Erie St Pittsburgh 12 Pa (1)
- FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (1-5)—ADV PG 90-91
- Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (2-5)
- General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (5)
- GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-3-4-5)—ADV PG 4-148
- Great Western Div Interlectric Corp 1401 Lexington Ave Warren Pa (1)
- Littlefuse Inc 1865 Miner St Des Plaines Ill (3)
- Monarch Electric Corp 118 E First St Jamestown NY (1-5)
- Pierce Renewable Fuses Inc Box F Leicester NY (1-5)
- ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (1-5)—ADV PG 122
- S & C ELECTRIC CO 4435 Ravenswood Ave Chicago 40 Ill (2)—ADV PG 166
- Solar Electric Corp 121 Central Ave Warren Pa (1)
- Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (1-5)
- Trico Fuse Mfg Co 2948 N 5th St Milwaukee 12 Wis (1)
- Ware Fuse Corp 4400 W Lake St Chicago 24 Ill (1-5)

4C. FUSE ACCESSORIES

1. Dummy plugs
2. Fuse clips
3. Fuse clip clamps
4. Fuse clip reducers
5. Fuse cutouts, blocks & holders
6. Fuse links
7. Fuse wire strip
8. Fuse adapter remover
9. Fuse clip cleaner

Supplementary equipment for low-voltage distribution fuses.

- Atlas E-E Corp 47 Prospect St Woburn Mass (2)
- Bussman Mfg Div McGraw-Edison Co University at Jefferson St Louis 7 Mo (1 thru 7)
- Cable Electric Products Inc 234 Daboll St Providence 7 RI (5)
- Chase-Shawmut Co 374 Merrimac St Newburyport Mass (2-5-6-7)
- Circle F Mfg Co 720 Monmouth St Trenton 4 NJ (5)
- Commercial Enclosed Fuse Co of NJ 6812 Polk St Guttenberg NJ (1-2-3-4-6-7)
- Connecticut Electric Mfg Co Main St Bantam Conn (5)
- Dante Electric Mfg Co Bantam Conn (2)
- Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (3-4-6)
- Excel Fuse Co 117 W Erie St Pittsburgh 12 Pa (2-6)
- General Electric Co Apparatus Sales Div Schenectady 5 NY (5-6)
- General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (5)
- Great Western Div Interlectric Corp 1401 Lexington Ave Warren Pa (3-6)
- Hoffman Engineering Corp 1050 Tyler St Anoka Minn (5)
- Holub Industries Inc 442 Elm St Sycamore Ill (3-4)
- Ideal Industries Inc 5136 Park Ave Sycamore Ill (3-4)
- Isco Corp 4730 Madison Rd Cincinnati 27 Ohio (2)
- Knox Porcelain Corp 2706 Mynders Ave (PO Box 2031) Knoxville 1 Tenn (5)
- Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (2-5)
- Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (2)
- Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (3-9)
- Monarch Electric Corp 118 E First St Jamestown NY (2-6)
- Multi Electric Mfg Inc 4223 W Lake St Chicago 24 Ill (2-5)
- Pierce Renewable Fuses Inc Box F Leicester NY (6)
- Royal Electric Corp 95 Grand Ave Pawtucket RI (4)
- Specialties Inc 2936 Sacramento St Pittsburgh 4 Pa (2)
- Square D Co 6060 Rivard St Detroit 11 Mich (2)
- Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (6)
- Sylvania Electric Products Inc 1740 Broadway NY 19 NY (2)
- Trico Fuse Mfg Co 2948 N 5th St Milwaukee 12 Wis (3-8)
- Ware Fuse Corp 4400 W Lake St Chicago 24 Ill (6)

4D. CIRCUIT BREAKERS

1. High voltage
2. 600v and less
3. Explosion-proof
4. Vapor-proof

For primary and secondary distribution feeder and branch circuit protection.

- Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (2)
- Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2)
- Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (2)
- BullDog Electric Products Div I-T-E Circuit Breaker Co 7610 Joseph Campus Detroit Mich (2)
- Cross-Hinds Co Syracuse 1 NY (2)
- Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (2)
- Derrick Light & Equipment Co 1201 E Daggett (PO Box 414) Fort Worth Tex (2-4)
- Federal Pacific Electric Co 50 Paris St Newark 5 NJ (1-2)
- Gemco Electric Co 25685 W. Eight Mile Rd Detroit 40 Mich (3)
- General Electric Co Apparatus Sales Div Schenectady 5 NY (1-2)
- General Electric Co Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn (2)
- Helmenmann Electric Co Pennsylvania Ave & Plum St Trenton 2 NJ (2)
- Hope Electrical Products Co Inc 27 Long Ave Hillside NJ (2)
- I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (1-2-3)
- Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo (3)
- Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (2)
- Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1)
- Mechanical Products Inc 1824 River St Jackson Mich (2)
- Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (2)
- Nelson Electric Mfg Co PO Box 5385 Tulsa Okla (1-2-3)
- Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (2-3)
- Russell & Stoll Co Inc 125 Barclay St NY 7 NY (2-3)
- Sangamo Electric Co 11th & Converse Springfield Ill (2)
- Square D Co 6060 Rivard St Detroit 11 Mich (1-2-3)
- WADSWORTH ELECTRIC MFG CO INC 20-34 W 11th St (Box 272) Covington Ky (2)—ADV PG 134-163-165
- Westinghouse Electric Corp PO Box 868 Pittsburgh 30 Pa (1-2)
- Westinghouse Electric Corp Standard Control Div Beaver Pa (2)
- WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (2-3)—ADV PG 2nd COVER
- Zinsco Electrical Products 729 Turner Los Angeles 12 Calif (2)

4E. SPECIAL PROTECTIVE EQUIPMENT

1. Cathodic protective equipment
2. Current-limiting reactors
3. Lightning protective equipment
4. Motor thermal overload devices
5. Network protectors
6. Ground rods
7. Ballast thermal protectors
8. Motor single-phasing protection
9. Capacitor protective gaps

- Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (2-4)
- Blackburn (Jasper) Corp 1525 Woodson Rd St Louis 14 Mo (6)
- Boque Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (2)
- Brach Mfg Corp 200 Central Ave Newark 3 NJ (3)
- Cathodic Protection Service 4601 Stanford St Houston Tex (1)
- Copperweld Steel Co Wire and Cable Div Glassport Pa (3-6)

Cutler-Hammer Inc 228 N. 4th St Milwaukee 1 Wis (4)
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (3)
 Engelhard Charles Inc 850 Passaic Ave East Newark N.J. (1)
 Enco Mfg Co PO Box 1039 Greenville Tex (4-8)
 General Cable Corp 420 Lexington Ave NY 17 NY (1)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (1 thru 5-9)
 Goetz (J F) Mfg Co 162 South St Hartford Wis (3)
 Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (3-6)
 Good-All Electric Mfg Co 112 W First St Ogallala Neb (1)
 Independent Protection Co Inc 1605-07 S Main St Goshen Ind (3)
 Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (3)
 Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (3)
 Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill (3-6)
 Knopp Inc 130 66th St Oakland 8 California (1)
 Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (3)

M & W Electric Mfg Co Inc 5 Walnut St (P O Box 87) East Palestine Ohio (6)
 Metals & Controls Div Texas Instruments Inc 34 Forest St Attleboro Mass (4)
 Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (2)
 Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (1)
 New Jersey Zinc Co 160 Front St New York 38 NY (1-6)
 Ohio Brass Co 380 N Main St Mansfield Ohio (3)
 Penn-Union Electric Corp 315 State St Erie Pa (6)
 Premax Products Div Chisholm-Ryder Co Inc College & Highland Aves Niagara Falls NY (6)
 R T & E Corp 1900 East North St Waukesha Wis (3)
 Rome Cable Corp 421 Ridge St Rome NY (1)
 Security Mfg & Contracting Co 606-612 Pine St Burlington Wis (3)
 Stradley Engineering Co P O Box 6006 Pittsburgh 11 Pa (8)
 Weaver (J A) Co 2110 Howard St St Louis 6 Mo (6)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (2-3-4-5)
 Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa (2-6)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
4-1	Current-Limiting Circuit Breakers; 20 p; Cat. No. 5043-B (I-T-E)
4-2	Distribution Cutouts and Arrester-Cutout Combination Units; 12p; Cat. No. J2-110 (Joslyn)
4-3	Distribution Lighting Arresters; 16p; Cat. No. J2-111 (Joslyn)
4-4	Cathodic Protection of Storage Tanks and Underground Pipes; 4p; Cat. No. RCR-1111 (Rome)
4-5	Magnetrip Circuit Breakers; 32p; Cat. No. 2300-D (Zinsco)

SECTION 5. WIRING DEVICES AND BOXES

See index for panelboards and other equipment normally housed in cabinets.

Switches other than wiring device switches are listed in Sec. 3.

Hangers and supports for cable and conduit are listed in Sec. 6 & 7, respectively.

Lamp dimmers are listed in Sec. 3.

5A. WIRING DEVICE SWITCHES

1. Canopy
2. Ceiling pull
3. Card
4. Delayed action
5. Door-operated
6. Key-operated
7. Lever-operated pull
8. Luminaire cap
9. Mercury
10. Momentary contact
11. Oil burner
12. Pendant
13. Pushbutton
14. Rotary
15. Tumbler
16. Weatherproof
17. Toggle

Small switches used for general control of lighting and appliance loads in residences, offices, etc.

Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (1 thru 7)
 Automatic & Precision Mfg Co 252 Hawthorne Ave Yonkers 5 NY (1)
 B & M Electric Corp 168 7th St Brooklyn 15 NY (10)
 Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (1-4)
 ●BELL ELECTRIC CO 5735 S Claremont Ave Chicago 36 Ill (2-4-5-6)—ADV PG 130-140-148
 Black (M) Mfg Co 300-08 W Third St Phila 6 Pa (1)
 Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn (1-2-3-4-5-6)
 Bulldog Electric Products Div I-T-E Circuit Breaker Co 7610 Joseph Campau Detroit Mich (3)
 CBC Electronics Co Inc 2601 N Howard St Philadelphia 33 Pa (3)
 Cable Electric Products Inc 234 Daboll St Providence 7 RI (1-2-3)
 Cam-Lok Div Empire Products Inc 9201 Blue Ash Rd (Box 98) Cincinnati 36 Ohio (4-6-11)
 Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif (4)
 ●CIRCLE F MFG CO 720 Monmouth St Trenton 4 NJ (1 thru 7)—ADV PG 92
 Crouse-Hinds Co Syracuse 1 NY (1-2-3-4-6)
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (4)
 Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (6)
 Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (1)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1-2-4-5-6-7)
 Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio (1-3-4)
 Gen Electric Mfg Co Inc 237 37th St Brooklyn NY (1-2-3-4-5-6)
 General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1-2-4-5-6-7)
 Glade Mfg Co 1632 W 75 Pl Chicago 20 Illinois (1)
 ●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1 thru 6)—ADV PG 4-148
 Hessel (W F) Co Inc 74 Beekman St NY 38 NY (3-4-6)
 ●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn (6)—ADV PG 152
 Hopax Electric Inc 547 Greenwich St NY 13 NY (1)
 ●HUBBELL (HARVEY) INC State St & Bostwick Ave Bridgeport 2 Connecticut (1 thru 6-12)—ADV PG 111
 Industrial Automation Corp 2415 W Montrose Ave Chicago III (6)
 Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (3-4-6)
 ●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (4-6)—ADV PG 119
 Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (1-2-4-5-6)
 Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (1-2)
 ●LEVITON MFG CO INC 236 Greenpoint Ave Brooklyn 22 NY (1-2-3-8 thru 16)—ADV PG 138
 Massey (A H) Inc 111 3rd St (P O Box 206) Derby Conn (1-2-3-4)
 McKinley (Ben P) Co 522 S Clinton St Chicago 7 Ill (2-4-5)
 Midwest Electric Products Inc 1515 N Front St Mankato Minn (1-3-4-6)
 Murray (D A) Co Inc 632 N Mill St Tipton Ind (1)
 P.L.M. Products Inc 3871 W 150 St Cleveland 11 Ohio (4)

Guardian Electric Mfg Co 1621 W Walnut St Chicago 12 Ill (13)
 Hart Mfg Co 164 Bartholomew Ave Hartford Conn (14-15)
 ●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn (16)—ADV PG 152
 Hubbell (Harvey) Inc State St & Bostwick Ave Bridgeport 2 Conn (2-3-5-6-8-9-10-11-12-13-14-15-16)
 Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo (7-10-12-13-15-16)
 Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (1-3-10)
 Lee Electric Inc 566 52nd St West New York NJ (13)
 ●LEVITON MFG CO INC 236 Greenpoint Ave Brooklyn 22 NY (1-2-3-8 thru 16)—ADV PG 138
 Massey (A H) Inc 111 3rd St (P O Box 206) Derby Conn (15)
 McGill Mfg Co Inc Valparaiso Ind (1-7-10-17)
 Micro Switch Div of Minneapolis-Honeywell Regulator Co Chicago & Spring Freeport Ill (12)
 Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (10-11-13)
 Pass & Seymour Inc Syracuse 9 NY (2-3-5-6-9-10-12-13-15-16)
 Pyramid Instrument Corp 630 Merrick Rd Lynbrook NY (10)
 ●ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (16)—ADV PG 122
 ●RODALE MFG CO INC 63 & Minor Sts Emmaus Pa (9-13-15)—ADV PG 153
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY (15-16)
 ●SIERRA ELECTRIC CORP 15100 S Figueroa Gardena Calif (9-13-15-17)—ADV PG 124
 Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY (2-5-6-9-10-11-13-15-16)
 Theiler (H J) Corp Ashmont Ave Whitinsville Mass (15)
 Touch-Plate Mfg Corp Box 1970 Long Beach Calif (10)
 Trine Mfg Corp 1430 Ferris Place New York 61 NY (5)
 Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky (5-16)
 Winterburn Mfg Co P O Box 386 Putnam Conn (5)

5B. CORD CONNECTION DEVICES

1. Caps, plugs, bases & taps, household type
2. Convenience outlets
3. Multi-outlet assemblies
4. Power cord-connection bodies, heavy duty
5. Range & dryer receptacles
6. Weatherproof outlets
7. Grounding adapters
8. TV antenna outlets
9. Combination TV-ac outlets
10. Fused plugs & taps
11. Explosion-proof plugs & receptacles
12. Locking-type plugs & receptacles

Devices for extension of electrical circuits to equipment by means of portable cords.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (2)
 Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1-2-4-6)

Pass & Seymour Inc Syracuse 9 NY (1-2-4-5-6)
 Perfect-Line Mfg Corp Old Country Rd & Railroad
 Ave P O Box 65 Hicksville LI NY (6)
 Pyle-National Co 1344 N Kostner Ave Chicago 51
 Ill (1-3-4-6)
 Rab Electric Mfg Co Inc 605 E 132 St New York
 54 NY (6)
 Ralco Mfg Co 123-141 N Albany Ave Chicago 12
 Ill (4)
 ●**RODALE MFG CO INC** 6th & Minor Sts Emmaus
 Pa (1-2-3-4-7)—ADV PG 153
 ●**ROYAL ELECTRIC CORP** 95 Grand Ave Pawtucket
 RI (1 thru 7)—ADV PG 122
 ●**SIERRA ELECTRIC CORP** 15100 S Figueroa
 Gardena Calif (2-3-5)—ADV PG 124
 Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen
 Cove NY (2-4-5-6)
 Sta-Tite Mfg Co 2000 Wyandotte Kansas City 8
 Mo (1)
 Standard Electric Time Co 89 Logan St Spring-
 field 2 Mass (3)
 Standard Portable Cord Co Inc Mayville NY (1)
 Star-A Electric Mfg Co Inc 269 Meserole St Brook-
 lyn 6 NY (1-2-4-5-6)
 Stonco Electric Products Co 333 Monroe Ave
 Kenilworth NJ (2-6)
 Superior Electric Co 83 Laurel St Bristol Conn
 (4)
 Tevco Insulated Wire 108 E Prospect Ave Burbank
 Calif (8-9)
 Tigerman Engineering Co 4332 N Western Ave
 Chicago 18 Ill (6)
 Urell Inc 43 Main St Bradford Pa (1)
 Wilkoff (M J) Co 823 Locust Pittsburgh 19 Pa
 (5)
 ●**WIREFORM CO** Hartford 10 Conn (3)—ADV PG
 141
 Woodhead (Daniel) Co 15 N Jefferson St Chicago
 6 Ill (1-4)

5C. LAMP ACCESSORIES

1. Ballasts
2. Bayonet sockets
3. Bipost sockets
4. DC fluorescent resistors
5. Fluorescent lamp capacitors
6. Fluorescent lamp holders
7. Fluorescent thermal starters & sockets
8. Locks & guards
9. Luminaire lamp holders
10. Screw sockets
11. Socket adapters & reducers
12. Quartz lamp holders
13. Weatherproof sockets

Adjustable Fixture Co 104 E Mason St Milwaukee
 2 Wis (10)
 Advance Transformer Co 2950 N Western Ave
 Chicago 18 Ill (1)
 Apollo Lighting Fixture Co Inc 162 W Third St
 Mt Vernon NY (2)
 Arrow-Hart & Hegeman Electric Co 103 Hawthorn
 St Hartford 6 Conn (6-7-8-9-10-11)
 Benjamin Electric Mfg Co Northwest Highway &
 Seegers Rd Des Plaines Ill (3-10-11)
 Bryant Electric Co 1421 State St (Box D Barn-
 um Sta) Bridgeport 2 Conn (3-6-7-8-10-11)
 Cable Electric Products Inc 234 Daboll St Providence
 7 RI (6-7)
 Chadsey Corp P O Box 1858 Hartford 1 Conn
 (8)
 ●**CIRCLE F MFG CO** 720 Monmouth St Trenton 4
 NJ (3-6-7-10-11)—ADV PG 92
 Coll Co of America Inc 207-209 Washington St
 Northvale NJ (1)
 Crouse-Hinds Co Syracuse 1 NY (10)
 Day-Ray Products Inc 1133 Mission St South Pas-
 adena Calif (1-6)
 Dependable-Electric Mfg Co Inc 537 Johnson Ave
 Brooklyn 37 NY (5)
 Derrick Light & Equipment Co 1201 E Daggett
 (P O Box 414) Fort Worth Tex (10)
 Diallight Corp 60 Stewart Ave Brooklyn 37 NY
 (2-10)
 Drake Mfg Co 4626 N Olcott Harwood Heights
 Chicago 31 Ill (2-10)
 Dura Electric Lamp Co Inc 62 E Bigelow St
 Newark 8 NJ (7)
 Duro-Test Corp 2321 Hudson Blvd North Bergen
 NJ (1-6-7-11)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza
 South Long Island City 1 NY (2-8-10-11-13)
 Earl Electric Mfg Corp 35-20 Borden Ave Long
 Island City NY (7)
 Electric Cord Co 21 Spruce St New York 38 NY
 (8)
 Ericson Mfg Co 1660 Hayden Ave Cleveland 12
 Ohio (8-10)
 France Mfg Co 10325 Berea Rd Cleveland 2
 Ohio (11)
 Gen Electric Mfg Co Inc 237 37th St Brooklyn
 NY (10-11)
 General Electric Co Apparatus Sales Div Schenec-
 tady 5 NY (1-5)
 General Electric Co Wiring Device Dept 95 Hath-
 away St Providence RI (6-7-9-10-11)
 Gets-A-Lite Co 3865 N Milwaukee Ave Chicago 41
 Ill (8)
 Girard-Hopkins 1000 40th Ave Oakland 1 Calif
 (5)
 Hubbell (Harvey) Inc State St & Bostwick Ave
 Bridgeport 2 Conn (6-7-10-11)
 ●**JACKSON ELECTRICAL CO** 900 W Van Buren St
 Chicago 7 Ill (10)—ADV PG 158
 Jefferson Electric Co 25th & Madison Bellwood
 Ill (1)

Kirkland (H R) Co 8 King St Morristown NJ
 (2-10)
 Knox Porcelain Corp 2706 Mynders Ave (P O Box
 2031) Knoxville 1 Tenn (10)
 Kulka Electric Corp 633 S Fulton Ave Mount
 Vernon NY (1-2-6-7-10-11)
 Laduby Co Inc Boston Post Rd (P O Box 88)
 Branford Conn (8)
 Lectrohm Inc 5560 Northwest Highway Chicago
 30 Ill (4)
 Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn
 22 NY (6-7-9-10-11)
 Marco Industries 207 S Helena St Anaheim Calif
 (10)
 Marvel Lamp Co 307 Newark St Hoboken NJ
 (7)
 Massey (A H) Inc 111 3rd St (P O Box 206)
 Derby Conn (10)
 McGill Mfg Co Inc Valparaiso Ind (8)
 Miskella Infra-Red Co E 73rd & Grand Ave Cleve-
 land 4 Ohio (12)
 Morse (Frank W) Co 354 Congress St Boston 10
 Mass (2-10-11)
 Pass & Seymour Inc Syracuse 9 NY (6-7-10-11)
 Pattern Products Co P O Box 135 Union NJ (8)
 Perfect-Line Mfg Corp Old Country Rd & Railroad
 Ave P O Box 65 Hicksville LI NY (10)
 Pyle-National Co 1344 N Kostner Ave Chicago 51
 Ill (10)
 Radionic Transformer Co 411 S Sangamon St Chi-
 cago 7 Ill (1)
 Ralco Mfg Co 123-141 N Albany Ave Chicago 12
 Ill (10)
 Robertson Transformer Co Thornton Road Blue
 Island Ill (1)
 Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa
 (10-11)
 ●**ROYAL ELECTRIC CORP** 95 Grand Ave Pawtucket
 RI (7-10)—ADV PG 122
 Sola Electric Co 4633 W 16th St Chicago 50
 Ill (1)
 Slater Electric & Mfg Co Inc 45 Sea Cliff Ave
 Glen Cove NY (10)
 Star-A Electric Mfg Co Inc 269 Meserole St
 Brooklyn 6 NY (6-7-10-11)
 Stratfield Co 434 Grand St Bridgeport 4 Conn
 (1)
 Suctar Laboratories Inc 1197 McCarter Highway
 Newark NJ (7)
 Surelite Products Co 368 E 148 St New York 55
 NY (7)
 Swedish Iron & Steel Corp 910 Westfield Ave
 Elizabeth NJ (1-6)
 Sylvania Electric Products Inc 1740 Broadway
 NY 19 NY (7)
 Union Insulating Co Inc Box 351 Parkersburg
 W Va (10)
 Universal Mfg Corp 29-51 E 6th St Paterson NJ
 (1)
 Ward Leonard Electric Co 28 South St Mount
 Vernon NY (4)
 Westinghouse Electric Corp Lighting Div 1216 W
 58th St (P O Drawer 5817) Cleveland 1 Ohio
 (1)
 Woodhead (Daniel) Co 15 N Jefferson St Chicago
 6 Ill (8-10)

5D. BOXES, WIRING

1. Concrete, sidewalk & underground
2. Explosion-proof
3. Floor
4. Interior wall & ceiling
5. Non-metallic
6. Pole base
7. Submersible
8. Weatherproof

Boxes for installation of wiring devices, for
 splices and connectors, and for pulling con-
 ductors into raceways. For boxes enclosing
 equipment, see "Cabinets" in index.

Adale Mfg Co 14300 Lorain Ave Cleveland 11
 Ohio (1-2-6-8)
 Adam (Frank) Electric Co 3647 Windsor Pl St
 Louis Mo (3-4)
 Alhambra Foundry Co Ltd 1147 Meridian Ave
 Alhambra Calif (1-7-8)
 ●**ALL-STEEL EQUIPMENT INC** Aurora Ill (4)—
 ADV PG 85
 Alwitt Mfg Co 1706 Lapham Dr Modesto Calif
 (1-3-7-8)
 Anderson (Albert & J M) Mfg Co 289 A St Boston
 10 Mass (1)
 Appleton Electric Co 1701-59 Wellington Ave Chi-
 cago 13 Ill (1-2-4-8)
 ●**ARROLET CORP** Foot of Bower St Montgomery Pa
 (4-8)—ADV PG 147
 ●**ARROW CONDUIT & FITTINGS CORP** 129 30th
 St Brooklyn 32 NY (1-4)—ADV PG 150
 Barber Electric Mfg Co Inc 30 Chestnut St N
 Attleboro Mass (8)
 Bell Electric Co 5735 S Claremont Ave Chicago
 36 Ill (8)
 Bonnell Electric Mfg Co Inc 192-194 Chambers
 St NY 7 NY (1-7-8)
 Bowers Mfg Co Inc 6700 Avalon Blvd Los Angeles
 5 Calif (4)
 Buckels (Chris) Inc 2300 S Springfield Ave Chi-
 cago 23 Ill (4)
 Burns (James F) Co 705-715 Cherry St Phila-
 delphia 6 Pa (1-2-3-4-7-8)
 Calvert Co 19851 Ingersoll Dr Rocky River 16
 Ohio (4)

Columbia Metal Box Co 260 E 143 St NY 51
 NY (4-8)
 Crouse-Hinds Co Syracuse 1 NY (1 thru 8)
 Dependable-Electric Mfg Co Inc 537 Johnson Ave
 Brooklyn 37 NY (4)
 Derrick Light & Equipment Co 1201 E Daggett
 (P O Box 414) Fort Worth Tex (7-8)
 Eliza Metal Products Co Box 408 Bridgeville
 Pa (4)
 ●**FULLMAN MFG CO** 1209-1215 Jefferson St Lal-
 rob Pa (3-6)—ADV PG 102
 G & W Electric Specialty Co 3500 W 127 St
 Blue Island Ill (1-2-7)
 Gemco Electric Co 25685 W Eight Mile Rd Detroit
 40 Mich (2-4-7-8)
 General Metals Inc 858 Goldsboro Greensboro NC
 (8)
 ●**GRAYBAR ELECTRIC CO INC** 420 Lexington Ave
 NY 17 NY (4-8)—ADV PG 4-148
 ●**HOFFMAN ENGINEERING CORP** 1050 Tyler St
 Anoka Minn (8)—ADV PG 152
 ●**HOPE ELECTRICAL PRODUCTS CO INC** 27 Long Ave
 Hillside NJ (1-2-6-7-8)—ADV PG 154
 ●**HUEMFELD CO ENGINEERED PRODUCTS DIV**
 2701 Spring Grove Ave Cincinnati 25 Ohio
 (8)—ADV PG 109
 Ideal-Simplet Fittings Inc 5136 Park Ave Sycamore
 Ill (1-4-8)
 Kees (F D) Mfg Co 700 Park Ave Beatrice Neb
 (8)
 ●**KEYSTONE MFG CO** 23328 Sherwood Rd Warren
 Mich (4-8)—ADV PG 149
 ●**KILLARK ELECTRIC MFG CO** 3940 Easton Ave
 St Louis 13 Mo (1-2-8)—ADV PG 119
 Low Electric Fittings Co 627 W Lake St Chicago
 6 Ill (3)
 Meco Metal Box & Panel Mfg Co Inc 2522 W
 Huntington St Phila 32 Pa (2-8)
 Midwest Electric Products Inc 1515 N Front St
 Mankato Minn (4-8)
 Moldcast Mfg Co 236 South St Newark 5 NJ (8)
 National Electric Div H K Porter Co Inc Porter
 Co Inc Porter Bldg Pittsburgh 19 Pa (1-3-4)
 Nelson Electric Mfg Co PO Box 5385 Tulsa Okla
 (2-8)
 Newart Mfg Co 6725 Machinery Ave Cleveland
 Ohio (4)
 ●**O Z ELECTRICAL MFG CO INC** 262 Bond St Brook-
 lyn 17 NY (2-7-8)—ADV PG 116
 Palmer Electric & Mfg Co 24 Water St Wakefield
 Mass (7)
 Parker Electrical Mfg Co 221 Washington St
 Oakland 7 Calif (4-8)
 Perfect-Line Mfg Corp Old Country Rd & Railroad
 Ave P O Box 65 Hicksville LI NY (1-4-8)
 Pyle-National Co 1344 N Kostner Ave Chicago 51
 Ill (2-8)
 Queen Products Co Inc Thirteenth & Rowan Sts
 Louisville 3 Ky (4-8)
 Rab Electric Mfg Co Inc 605 E 132 St New York
 54 NY (1-2-8)
 Ralco Mfg Co 123-141 N Albany Ave Chicago 12
 Ill (2)
 Richards (J R) Co PO Box 482 Carnegie Pa
 (1-3-4-5)
 Rusgreen Mfg Co 14262 Birwood Ave Detroit 38
 Mich (1-2-3-4-7-8)
 Russell & Stoll Co Inc 125 Barclay St NY 7
 NY (2-4-8)
 ●**SPRING CITY ELECTRICAL MFG CO** Spring City
 85 Pa (1-2-3-4-6-7-8)—ADV PG 165
 Steel City Electric Co 1207 Columbus Ave Pitts-
 burgh 33 Pa (1-3-4)
 Stonco Electric Products Co 333 Monroe Ave
 Kenilworth NJ (4-8)
 Sun Electric Products Inc 28 S Day St Orange
 NJ (4)
 Theplit Mfg Co Gregg & Hammond Sts Carnegie
 Pa (4)
 Union Insulating Co Inc Box 351 Parkersburg
 W Va (4-5)
 V V Fitting Co 711 Cherry St Phila & Pa (4)
 Williams (H E) Products Co 106 S Main St
 Carthage Mo (4)
 Woodhead (Daniel) Co 15 N Jefferson St Chicago
 6 Ill (8)
 Young Electric & Mfg Co Inc 2134 Curtis Denver
 2 Colo (1-3-8)

5E. BOX HARDWARE

1. Covers & plates
2. Hickey
3. Knockout blanks
4. Studs
5. Supports & hangers
6. Cable-to-box connectors
7. Weatherproof box covers & plates
8. Floor outlet nozzles

Accessories used with wiring boxes. See also
 "Fixture Hangers" and "Conduit Fittings".

Adale Mfg Co 14300 Lorain Ave Cleveland 11
 Ohio (6)
 All-Steel Equipment Inc Aurora Ill (1-5)
 Allen-Stevens Conduit Fittings Corp 33-53 62nd
 St Woodside 77 NY (6)
 Allied Industries Inc PO Box 119 Ogallala Neb
 (6)
 Anderson Electric Corp PO Drawer 2151 Birming-
 ham 1 Ala (6)
 Appleton Electric Co 1701-59 Wellington Ave Chi-
 cago 13 Ill (1-2-3-5-6)
 ●**ARROLET CORP** Foot of Bower St Montgomery
 Pa (1-3-5)—ADV PG 147

●ARROW CONDUIT & FITTINGS CORP 129 30th St. Brooklyn 32 NY (1-5)—ADV PG 150
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (1)
Badger Die Casting Corp 201 W Oklahoma Ave Milwaukee 7 Wis (6)
●BELL ELECTRIC CO 5735 S Claremont Ave Chicago 36 Ill (1-7)—ADV PG 130-140-148
Benjamin Electric Mfg Co Northwest Highway & Seegers Rd Des Plaines Ill (1)
Blackhawk Industries 250 S Main St Dubuque Iowa (3-5)
Bowers Mfg Co Inc 6700 Avalon Blvd Los Angeles 3 Calif (1 thru 5)
Bryant Electric Co 1421 State St (Box D Barnum St) Bridgeport 2 Conn (1)
●BUCHANAN ELECTRICAL PRODUCTS CORP 420 US Route 22 Hillside NJ (3-6)—ADV PG 149
Burbank Electrical Products 215 W Palm Ave PO Box 7 Burbank Calif (5)
Burns (James F) Co 705-715 Cherry St Philadelphia 6 Pa (1-3-5)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (1)
Circle F Mfg Co 720 Monmouth St Trenton 4 NJ (1)
Conduit Fittings Corp 6400 W 66th St Chicago 38 Ill (4-6)
Crouse-Hinds Co Syracuse 1 NY (1-3-5)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (6)
Dossert Mfg Corp 249-255 Huron St Brooklyn 22 NY (6)
Duro Fittings Co 2210 S Davis Ave Los Angeles 22 Calif (2-4)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1)
Earl Electric Mfg Corp 35-20 Borden Ave Long Island City NY (1)
Elliott Electric Products Co 1513 Olmstead Ave New York 62 NY (1 thru 6)
●FULLMAN MFG CO 1209-1215 Jefferson St Latrobe Pa (1-5)—ADV PG 102
Gedney Electric Co Americas Bldg Radio City NY 20 NY (2-4-6)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1)
General Metals Inc 858 Goldsboro Greensboro NC (1-3-5)
Halex Die Casting Co 8640 Bessemer Cleveland 27 Ohio (6)
Heyman Mfg Co Kenilworth 20 NJ (6)
Hubbell (Harvey) Inc State St & Bostwick Ave Bridgeport 2 Conn (1)
Huenefeldt Co Engineered Products Div 2701 Spring Grove Ave Cincinnati 25 Ohio (1)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (5)—ADV PG 67-68-69-70
Ideal-Simplet Fittings Inc 5136 Park Ave Sycamore Ill (1-3-5)
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb (5)
Keystone Mfg Co 23328 Sherwood Rd Warren Mich (1-5)
Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo (6)
Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (1)
Krusse-Rieke Auburn Ind (5)
Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY (1)
Law Electric Fittings Co 627 W Lake St Chicago 6 Ill (1-3)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (1-3-5)
M & W Electric Mfg Co Inc S Walnut St (P O Box 87), East Palestine Ohio (6)
Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (1 thru 6)
Massey (A H) Inc 111 3rd St (P O Box 206) Derby Conn (1)
McKinley (Ben P Co) 522 S Clinton St Chicago 7 Ill (1-5)
Metallectrics Inc 677 Broadway NY 12 NY (2-4-6)
Metro Casting Co Inc 47 Grattan St Brooklyn 37 NY (6)
Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill (2-3-4-6)
National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (6)
Newart Mfg Co 6725 Machinery Ave Cleveland Ohio (5)
O Z Electrical Mfg Co Inc 262 Bond St Brooklyn 17 NY (6)
Paine Co Fullerton Ave & Westgate Rd Addison Ill (5)
Pass & Seymour Inc Syracuse 9 NY (1)
Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville LI NY (1)
Pucel Enterprises Inc 3746 Kelley Ave Cleveland 14 Ohio (1)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (6)
Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky (1)
Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (3)
Rattan Mfg Co 10 Wall St (P O Box 1745) New Haven 7 Conn (2-4-6)
Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (6)
Redi-Bolt Inc 5334 Indianapolis Blvd East Chicago Ind (4-5)
Reichert Float and Mfg Co 2242 Smead Ave Toledo 6 Ohio (3)
Richards (J R) Co P O Box 482 Carnegie Pa (1-3-4-5)

Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (1)
●ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (1-7)—ADV PG 122
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (6)
●SIERRA ELECTRIC CORP 15100 S Figueroa Gardena Calif (1)—ADV PG 124
Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY (1)
Spring City Electrical Mfg Co Spring City 85 Pa (1)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (1)
Steel City Electric Co 1207 Columbus Ave Pittsburgh 33 Pa (1-2-3-4-5-6)
Steel Electric Products Co Inc 5602 18th Ave Brooklyn 4 NY (1 thru 5)
Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (1)
Thepitt Mfg Co Gregg & Hammond Sts Carnegie Pa (6)
Thomas & Betts Co 36 Butler St Elizabeth 1 NJ (3-5-6)
Tomic Sales & Engineering Co 20000 Sherwood Ave Detroit 34 Mich (4)
Williams (H E) Products Co 106 S Main St Carthage Mo (1-5)
Yorkville Metal Products Co 677 Broadway NY 12 NY (2-4-6)

5F. CABINETS, HOUSINGS & ENCLOSURES

1. Fuse & cutoff
2. Meter
3. Panelboard
4. Switch & circuit breaker
5. Transformer
6. Weatherproof
7. Explosion-proof

Enclosures only; used for mounting and physical protection of equipment.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (1-3-4)
Alwatt Mfg Co 1706 Lapham Dr Modesto Calif (1-2-3-5)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (7)
Barber Electric Mfg Co Inc 30 Chestnut St N Attleboro Mass (1-5)
Bonnell Electric Mfg Co Inc 192-194 Chambers St NY 7 NY (3-4)
Burns (James F) Co 705-715 Cherry St Philadelphia 6 Pa (1-2-3-4-5)
Cleveland Switchboard Co 2925 E 79 St Cleveland 4 Ohio (3)
Code Equipment Sales Co P O Box 5847 Philadelphia 28 Pa (2)
Columbia Metal Box Co 260 E 143 St NY 51 NY (1-3-5)
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio (3-5)
Crouse-Hinds Co Syracuse 1 NY (1-3-4-7)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (4)
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (4-6)
Eliza Metal Products Co Box 408 Bridgeville Pa (2)
Falstrom Co 62 Falstrom Court Passaic NJ (2-3-4-5)
Gemco Electric Co 23685 W Eight Mile Rd Detroit 40 Mich (3-5)
General Metals Inc 858 Goldsboro Greensboro NC (1-2)
●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn (1 thru 5)—ADV PG 152-157
●HOPE ELECTRICAL PRODUCTS CO INC 27 Long Ave Hillside NJ (1-4-5)—ADV PG 154-157
●HUENEFELD CO ENGINEERING PRODUCTS DIV 2701 Spring Grove Ave Cincinnati 25 Ohio (1-3-4-5)—ADV PG 109
●KEES (F D) MFG CO 700 Park Ave Beatrice Neb (2-5)—ADV PG 161
●KEYSTONE MFG CO 23328 Sherwood Rd Warren Mich (1 thru 5)—ADV PG 149
Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo (3-4-5)
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (3-4-5)
Littleford Bros Inc 453 E Pearl St Cincinnati 2 Ohio (3)
Meco Metal Box & Panel Mfg Co Inc 2522 W Huntington St Phila 32 Pa (1-3-5)
Midwest Electric Products Inc 1515 N Front St Mankato Minn (1-4)
Moldcast Mfg Co 236 South St Newark 5 NJ (6)
Nullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif (3)
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (4-5)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (3)
Palmer Electric & Mfg Co 24 Water St Wakefield Mass (1 thru 5)
Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif (1 thru 5)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (3-4)
Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky (1-2-3-4-5)
Russell & Stoll Co Inc 125 Barclay St New York 7 NY (7)

●SPRING CITY ELECTRICAL MFG CO Spring City 85 Pa (1 thru 5-7)—ADV PG 165
Square D Co 6060 Rivard St Detroit 11 Mich (1-2-3-4-5)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (3)
Sun Electric Products Inc 28 S Day St Orange NJ (1-3-5)
V V Fitting Co 711 Cherry St Phila 6 Pennsylvania (1)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky (1-3-4-5)
Westinghouse Electric Corp Standard Control Div Beaver Pa (4)
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1-2-3-4-5)

5G. FIXTURE HANGERS & SUPPORTS

1. Fixed
2. Disconnecting type

Stems, channels, brackets and chain for permanent support of lighting fixtures. For poles and standards, see index.

Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif (1)
Allen-Stevens Conduit Fittings Corp 33-53 62nd St Woodside 77 NY (1)
Benjamin Electric Mfg Co Northwest Highway & Seegers Rd Des Plaines Ill (1)
Bowers Mfg Co Inc 6700 Avalon Blvd Los Angeles 3 Calif (1)
Crouse-Hinds Co Syracuse 1 NY (1)
Eagle Mfg Co 3508 Avalon Blvd Los Angeles 11 Calif (1)
Elliott Electric Products Co 1513 Olmstead Ave New York 62 NY (1)
Federal Shock Mount Corp 1060 Washington Ave New York 56 NY (1)
Gedney Electric Co Americas Bldg Radio City NY 20 NY (1)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY—ADV PG 4-148
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (1)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (1)—ADV PG 67-68-69-70
Ideal-Simplet Fittings Inc 5136 Park Ave Sycamore Ill (1)
Jackson Electric Co 900 W Van Buren St Chicago 7 Ill (1)
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb (1)
Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo (1)
●LINT (CLYDE W) 2323 W 18 St Chicago 8 Ill (1)—ADV PG 159
Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (1)
Metallectrics Inc 677 Broadway New York 12 New York (1)
Multi-A-Frame Div Ainsworth Precision Castings Co 1471-77 E Atwater St Detroit 7 Michigan (1)
Multi Electric Mfg Inc 4223 W Lake St Chicago 24 Ill (1)
Paine Co Fullerton Ave & Westgate Rd Addison Ill (1)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (1)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (1)
Steel City Electric Co 1207 Columbus Ave Pittsburgh 33 Pa (1)
Steel Electric Products Co Inc 5602 18th Ave Brooklyn 4 NY (1)
Thompson Electric Co P O Box 873 Cleveland 22 Ohio (2)
Tomic Sales & Engineering Co 20000 Sherwood Ave Detroit 34 Mich (1)
Unistrut Products Co 933 Washington Blvd Chicago 7 Ill (1)
Versabar Corp 14 Whyte Co Jersey City New Jersey (1)
Westinghouse Electric Corp Lighting Div 1216 W 58th St (P O Drawer 5817) Cleveland 1 Ohio (1)
Wili-Son Mfg Co Cloverport Ky (1)
Yorkville Metal Products Co 677 Broadway NY 12 NY (1)

5H. METER SOCKETS & MOUNTINGS

Sockets, troughs and accessories for kw-hr meters. See Sec. 5F for meter cabinets.

Anchor Mfg Co P O Box 959 Manchester NH
Code Equipment Sales Co P O Box 5847 Philadelphia 28 Pa
General Electric Co Apparatus Sales Div Schenectady 5 NY
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY
Palmer Electric & Mfg Co 24 Water St Wakefield Mass
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

Code No.	Description, Pages Catalog No. & Mfr.
5-1	Plugs and Receptacles; 28p; Cat. No. 40E (Anderson)

5-2	Boxes and Cabinets; 25p; Cat. No. 50 (Bonnell)
5-3	Wiring Devices; 76p; Cat. No. 68 (Cable)
5-4	Wiring Devices and Electrical Specialties; 36p; (Eagle)
5-5	Heavy-Duty Plugs and Receptacles; 49p; Cat. No. 49 (Hessel)
5-6	Electrical Enclosures; 24p (Hoffman)
5-7	Boxes, Cabinets & Enclosures; 16p; Cat. No. 159-B (Keystone)

5-8	Engineered Wiring Devices; 24p; Cat. No. W-58 (Perfect-Line)
5-9	Plugs and Receptacles, Fittings and Boxes; 80p; Cat. No. 2 (Ratco)
5-10	Low-Voltage Switching Systems; 18p (Touch Plate)
5-11	Fluorescent Lamp Ballasts; 12p (Universal)
5-12	Hand Lamps, Receptacles and Sockets; 50p; Cat. No. 14 (Woodhead)

SECTION 6. CONDUCTORS AND CONNECTORS

Wire and cable are listed in 6A, 6B and 6C by code letter designations used in the National Electrical Code; Sections 6D and 6E list applications.

Wire and cable tools are listed in 12B; underground supports, poles, etc. in Sec. 1; raceways and enclosures in Sec. 7.

6A. BUILDING & POWER CABLE

1. A, AA, AI, AIA—asbestos
2. AC, ACT, ACV—armored cable
3. ACL—armored cable, lead-covered
4. AVA, AVB, AVL—asbestos & varnished cambric
5. MI—mineral-insulated, metal-sheathed
6. NM, NMC—non-metallic sheathed
7. Paper, underground service
8. R—Code rubber
9. RM, RHM—heat-resistant rubber
10. RH, RW, RHW—moisture & heat-resistant rubber
11. RW—moisture-resistant rubber
12. RU—latex rubber
13. RUH—heat-resistant latex rubber
14. RUW—moisture-resistant latex rubber
15. SB—slow-burning
16. SE, ASE, USE—service entrance
17. T—thermoplastic
18. TA—thermoplastic & asbestos
19. TW—moisture-resistant thermoplastic
20. UF—underground feeder & branch circuit
21. varnished cambric
22. WP—weatherproof

- Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (8-17-19)
- Acorn Insulated Wire Co 36 Freeman St Pawtucket RI (1-2-4-6-8-9-10-11-16-17-18-19-20-21)
- American Electric Cable Co 181 Appleton St Holyoke Mass (19)
- American Metal Moulding Co 146 Colt St Irvington NJ (2-3-19)
- American Insulated Wire Corp 36 Freeman St Pawtucket RI (1-2-4-6-8-9-10-11-17-18-19-20-21-22)
- AMERICAN STEEL & WIRE DIV UNITED STATES STEEL CORP Rockefeller Bldg Cleveland 13 Ohio (1-3-7 thru 11-15 thru 19-21-22)—ADV PG 135
- Anaconda Wire & Cable Co 25 Broadway New York 4 NY (4-6-7-8-9-10-11-16-17-18-19-20-21-22)
- Chester Cable Corp Oakland Ave Chester NY (2-3-6-17-20-22)
- Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY (2-3-6-8-9-10-11-16-17-19-20-21-22)
- CLIFTON CONDUIT CORP 3300 Eastbourne Ave Baltimore 24 Md (2-10-19)—ADV PG 93
- COLLYER INSULATED WIRE CO 249 Roosevelt Ave Pawtucket RI (1-4-6-8 thru 11-16 thru 21)—ADV PG 97
- Columbia Cable & Electric Corp 255 Chestnut St Brooklyn 8 NY (2-3-6-17-19-20)
- Continental Wire Corp P O Box 366 Wallingford Conn (1-4-17-18-19-20-21)
- Copperweld Steel Co Wire and Cable Div Glassport Pa (22)
- Cornish Wire Co Inc 50 Church St NY 7 NY (17)
- CRESCENT INSULATED WIRE & CABLE CO 319 N Olden Ave Trenton 5 NJ (2-3-6-8 thru 11-16-17-19-20-21)—ADV PG 88

- Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (2-3-17-20-22)
- Ettco Wire & Cable Corp 75 Onderdonk Ave Brooklyn 37 NY (2-6-16-17-19-20)
- GENERAL CABLE CORP 420 Lexington Ave NY 17 NY (1 thru 11, 16 thru 22)—ADV PG 94-95
- General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-2-3-4-6-9-10-11-16-18-19-20-21)
- Hatfield Wire and Cable Div Continental Copper & Steel Indus Inc 467 Hillside Ave Hillside 5 NJ (2-6-9-10-11-16-19-20)
- Kaiser Aluminum & Chemical Sales Inc 1924 Broadway Oakland Calif (1-2-3-6-8-9-10-11-12-13-14-16-17-19-20)
- Kennecott Wire and Cable Co Phillipsdale (Rumford 16) RI (3-7-15-21-22)
- Narragansett Wire Co 541 Pawtucket Ave Pawtucket RI (6-9-10-16-19-20-22)
- National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (1-2-3-4-6-9-10-16-18-19-20-21)
- Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (5)
- Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY (2)
- Okonite Co Passaic NJ (1-4-7-9-10-11-16-19-21-22)
- Paranite Wire & Cable Div Essex Wire Corp Marion Ind (2-3-6-8-9-10-11-16-17-19-20-22)
- PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (1-3-4-7 thru 11-15-17 thru 22)—ADV PG 114-115
- Plastic Wire & Cable Corp E Main St Jewett City Conn (17-19-20)
- Plastoid Corp 42-61 24th St L I C 1 NY (1-17-18-19-20)
- Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (1-2-4-6-17-18-19-20)
- Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI (1-6-17-21)
- Rockbestos Products Corp Nicoll and Craner Sts New Haven 4 Conn (1-2-4-18-21)
- Roebing's (John A) Sons Corp 640 S Broad St Trenton 2 NJ (7-9-10-11-16-17-19-20-21-22)
- ROME CABLE CORP 421 Ridge St Rome NY (2-3-6-8 thru 11-16-17-19-20-22)—ADV PG 76 through 81
- Royal Electric Corp 95 Grand Ave Pawtucket RI (1)
- Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (2-4-6 thru 11-17-19-20-21)
- Southwire Co Carrollton Ga (17-19-22)
- Times Wire & Cable Co Wallingford Conn (17)
- TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1-2-3-4-6-8 thru 11-16-17-19-20-21)—ADV PG 129
- Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (19)
- Walker Brothers End St Conshohocken Pa (6-9-10-11-16-19-20-22)
- Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (1-2-3-4-6-9-10-11-16-21)

6B. FIXTURE WIRE

1. AF—heat-resistant asbestos-covered
 2. CF—heat-resistant cotton-covered
 3. FF—rubber-covered flexible stranding
 4. FFH—heat-resistant rubber-covered flexible stranding
 5. RF—rubber-covered, solid or 7-strand
 6. RFH—heat-resistant rubber-covered, solid or 7-strand
 7. SF—silicone rubber, solid or 7-strand
 8. SFF—silicone rubber, flexible stranding
 9. TF—thermoplastic-covered, solid or stranded
 10. TFF—thermoplastic-covered, flexible stranding
- Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (5-9-10)
- Acorn Insulated Wire Co 36 Freeman St Pawtucket RI (1 thru 6-9-10)
- American Electric Cable Co 181 Appleton St Holyoke Mass (19-10)
- American Insulated Wire Corp 36 Freeman St Pawtucket RI (1 thru 6-9-10)

- AMERICAN STEEL & WIRE DIV United States Steel Corp Rockefeller Bldg Cleveland 13 Ohio (5-6-9-10)—ADV PG 135
- Anaconda Wire & Cable Co 25 Broadway New York 4 NY (9-10)
- Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY (9-10)
- Brand (William) & Co Inc 51 North St Williamstown Conn (9-10)
- Chester Cable Corp Oakland Ave Chester NY (9-10)
- Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY (2 thru 6-9-10)
- COLLYER INSULATED WIRE CO 249 Roosevelt Ave Pawtucket RI (1-3 thru 10)—ADV PG 97
- Continental Wire Corp P O Box 366 Wallingford Conn (1-2-7-8-9-10)
- Cornish Wire Co Inc 50 Church St NY 7 NY (3-9-10)
- CRESCENT INSULATED WIRE & CABLE CO 319 N Olden Ave Trenton 5 NJ (3-4-5-6-9-10)—ADV PG 88
- Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (1 thru 10)
- Ettco Wire & Cable Corp 75 Onderdonk Ave Brooklyn 37 NY (9)
- GENERAL CABLE CORP 420 Lexington Ave NY 17 NY (1 thru 10)—ADV PG 94-95
- General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-3-4-7-8-9-10)
- Hatfield Wire and Cable Div Continental Copper & Steel Indus Inc 467 Hillside Ave Hillside 5 NJ (6-9-10)
- Kaiser Aluminum & Chemical Sales Inc 1924 Broadway Oakland Calif (1-2-3-4-5-6-7-8-9-10)
- Lew's Engineering Co 52 Rubber Ave Naugatuck Conn (1)
- National Electric Div H K Porter Co Inc Porter Bldg (Pittsburgh 19 Pa (1-5-6-7-8-9-10)
- Okonite Co Passaic NJ (1-3-4-5-6-8-9-10)
- Paranite Wire & Cable Div Essex Wire Corp Marion Ind (5-6-7-8-9-10)
- Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (9-10)
- PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (1-3-4-5-6-9-10)—ADV PG 114-115
- Plastic Wire & Cable Corp E Main St Jewett City Conn (9-10)
- Plastoid Corp 42-61 24th St L I C 1 NY (9-10)
- Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (1-9-10)
- Rockbestos Products Corp Nicoll and Craner Sts New Haven 4 Conn (1)
- ROME CABLE CORP 421 Ridge St Rome NY (3-4-5-6-8-9-10)—ADV PG 76 through 81
- ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (1-2-3-9-10)—ADV PG 122
- Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (3 thru 10)
- Southwire Co Carrollton Ga (9)
- Suprenant Mfg Co 199 Washington St Boston 8 Mass (9-10)
- Times Wire & Cable Co Wallingford Conn (9-10)
- Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (9-10)
- Walker Brothers End St Conshohocken Pa (9-10)
- Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (1-4)

6C. FLEXIBLE CORD

1. AFC, AFPD, AFPO—asbestos-covered, heat-resistant
2. AFS, AFJJ—rubber-jacketed, heat-resistant
3. AVPD, AVPO—heat- and moisture-resistant
4. C—lamp
5. CA—armored
6. CFC, CFPD, CFPO—cotton-covered, heat-resistant
7. E, ED, ET—elevator cable
8. HC, HPD—heater
9. HPN—heater, all-neoprene
10. HS—heater, jacketed
11. HSJ—heater, rubber-jacketed
12. K—heavy-duty, braided

13. P—reinforced
14. PD—twisted portable
15. PD—parallel
16. PW—reinforced, moistureproof
17. S, SO, ST—hard service
18. SJ, SJO, SJT—hard service, junior
19. SP—parallel, all rubber
20. SPT—parallel, all plastic
21. SR, SRT—range cable
22. SV, SVT—vacuum cleaner
23. TF, TFT, TS, TST—tinsel

Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (2-4-7 thru 23)
 Accorn Insulated Wire Co 36 Freeman St Pawtucket RI (1-3-4-6-8 thru 22)
 Alpha Wire Corp 200 Varick St New York 14 NY (15-17-19-20-22)
 American Electric Cable Co 181 Appleton St Holyoke Mass (4-8-18-20-22)
 American Insulated Wire Corp 36 Freeman St Pawtucket RI (1-2-4-6-8-9-10-11-13-14-15-17-18-19-20-22)

●AMERICAN STEEL & WIRE DIV UNITED STATES STEEL CORP Rockefeller Bldg Cleveland 13 Ohio (7-17-18)—ADV PG 135

Anaconda Wire & Cable Co 25 Broadway New York 4 NY (12-17-18)
 Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY (8-15-20)
 Belden Mfg Co P O Box 5070A Chicago 80 Ill (8-9-10-11-17-18-19-20-21-22-23)
 Chester Cable Corp Oakland Ave Chester NY (8-17-18-20-22)

Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY (4-5-12-13-14-17-18-19-20-21)
 ●COLLYER INSULATED WIRE CO 249 Roosevelt Ave Pawtucket RI (1 thru 4-7-12 thru 18-20-21-22)—ADV PG 97

Columbia Cable & Electric Corp 255 Chestnut St Brooklyn 8 NY (5)
 Continental Wire Corp P O Box 366 Wallingford Conn (1-3-6)
 Cornish Wire Co Inc 50 Church St NY 7 NY (4-8-9-11-15-17-18-20-22)

Crescent Co Inc 20 Central Ave Pawtucket RI (4-15-17-18-19-20-22)
 ●CRESCENT INSULATED WIRE & CABLE CO 319 N Olden Ave Trenton 5 NJ (12-14-15-17-18-19-20-22)—ADV PG 88

Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (4-5-6-8-10-14-17 thru 23)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (20)
 ●GENERAL CABLE CORP 420 Lexington Ave NY 17 NY (1 thru 22)—ADV PG 94-95

General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-2-3-8-9-15-17-18-19-20-21-22)
 General Insulated Wire Works Inc 69 Gordon Ave Providence 5 RI (8 thru 11-17-18-19-20-21-22-23)
 Hatfield Wire and Cable Div Continental Copper & Steel Indus Inc 487 Hillside Ave Hillside 5 NJ (7 thru 23)

Kaiser Aluminum & Chemical Sales Inc 1924 Broadway Oakland Calif (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-22-23)
 Lowell Insulated Wire Corp P O Box 260 Pawtucket RI (9-15-17-18-19-20-22)
 National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh Pa (1-2-18)

Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY (17)
 Okonite Co Passaic NJ (2-4-7-17 thru 21)
 Packard Electric Div General Motors Corp Warren Ohio (9-10-11-12-13-14-15-16-17-18-19-20-22)
 Parantire Wire & Cable Div Essex Wire Corp Marion Ind (4-7-8-9-11-12-13-15-17-18-19-20-21-22)
 Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (18-20-21-22-23)

●PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (4-17-18-19-20-22)—ADV PG 114-115
 Plastic Wire & Cable Corp E Main St Jewett City Conn (17-18-20-21-22-23)
 Plastoid Corp 42-61 24th St L I C 1 New York (5-20)
 Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (1-20)

Rockbestos Products Corp Nicol and Canner Sts New Haven 4 Conn (1-3)
 Roebbing's (John A) Sons Corp 640 S Broad St Trenton 2 NJ (7-17)
 ●ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (1-4-6-8 thru 11-13 thru 23)—ADV PG 122

●ROME CABLE CORP 421 Ridge St Rome NY (7-14-15-17 thru 22)—ADV PG 76 through 81
 Shallicross Controls Inc 2217-21 N 31 St Milwaukee 8 Wis (1)
 Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (2-3-5-7-9-10-12-13-14-16 thru 21)
 Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (8-10-15-17-18-22)

Times Wire & Cable Co Wallingford Conn (12-17-18-20-21-22)
 ●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1-2-6-15-17-18-21-29-31-32)—ADV PG 129

Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (20-22-23)
 Walker Brothers End St Conshohocken Pennsylvania (17-21)
 Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (2-14-15-17-18-21-22)
 Whitney Blake Co 102 Pershing St New Haven 14 Conn (4-9-11-17-18-19-20-22)

6D. SPECIFIC APPLICATIONS OF WIRE & CABLE

1. Airport
2. Appliance
3. Barn
4. Brewery
5. Bridge
6. Control
7. Electric furnace
8. Elevator
9. Gas tube sign
10. Ground
11. Heater
12. Lamp
13. Magnet
14. Marine
15. Parkway (Suburban)
16. Railway
17. Service drop
18. Service entrance
19. Signal & communications
20. Stage lighting
21. Submarine
22. Thermostat
23. Welding
24. Water-cooled leads
25. Lead wire
26. Electric fence
27. Trolley
28. Annunciator
29. Fixture
30. Bus drop
31. Series street lighting
32. Pump
33. Cathodic protection
34. Trailer
35. High voltage

Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (1-2-6-8-11-12-15-19-20)
 Accorn Insulated Wire Co 36 Freeman St Pawtucket RI (2-3-4-6-10-11-12-17-18-19-20)

Alpha Wire Corp 200 Varick St New York 14 NY (1-2-6-13-19-25)
 Alphasud Wire & Cable Co 25 Van Dyke Ave (P O Box 709) New Brunswick NJ (19)
 American Electric Cable Co 181 Appleton St Holyoke Mass (2-6-9-12-19-20)
 American Insulated Wire Corp 36 Freeman St Pawtucket RI (1-2-3-4-6-11-12-15-17-18-19-20)

●AMERICAN STEEL & WIRE DIV UNITED STATES STEEL CORP Rockefeller Bldg Cleveland 13 Ohio (1-2-6 thru 11-13 thru 21)—ADV PG 135
 American Super-Temperature Wires Inc Winooski Vt (13)
 Anaconda Wire & Cable Co 25 Broadway New York 4 NY (1 thru 21)
 Ansonia Wire & Cable Co 111 Martin St Ashton RI (1-6-19)

Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY (2-11-12)
 Belden Mfg Co P O Box 5070A Chicago 80 Ill (2-9-11-12-13-14-19-23)
 Brand (William) & Co Inc 51 North St Willimantic Conn (2-6-19)
 Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (20)

Carol Cable Co 190 Middle St Pawtucket RI (2-6-19)
 Chester Cable Corp Oakland Ave Chester NY (2-3-6-9-12-19-20)
 Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY (1-2-3-5-6-8-14-15-17-18-19-20)
 ●CLIFTON CONDUIT CORP 3300 Eastbourne Ave Baltimore 24 Md (18)—ADV PG 93

●COLLYER INSULATED WIRE CO 249 Roosevelt Ave Pawtucket RI (2 thru 8-10-12-14 thru 20)—ADV PG 97
 Continental Wire Corp P O Box 366 Wallingford Conn (6-22)
 Copperweld Steel Co Wire and Cable Div Glassport Pa (19)
 Cornish Wire Co Inc 50 Church St NY 7 NY (2-19-20)

●CRESCENT INSULATED WIRE & CABLE CO 319 N Olden Ave Trenton 5 NJ (4 thru 10-12-15 thru 20)—ADV PG 88
 Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (2-4-6-7-8-11-12-15-17-18-19-20)
 Driver (Wilbur B) Co 1875 McCarter Highway Newark 4 NJ (7-11)

●GENERAL CABLE CORP 420 Lexington Ave NY 17 NY (1 thru 21)—ADV PG 94-95
 General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-2-6-9-11-13-14-15-18-19-21)
 General Insulated Wire Works Inc 69 Gordon Ave Providence 5 RI (2-10-11-12-17-18-19)

●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (2-6-12-13-17-18)—ADV PG 4-148
 Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc 487 Hillside Ave Hillside 5 NJ (1-2-3-4-6-8-9-11-12-14 thru 20-23-29-35)
 Hendrix Wire & Cable Corp Milford NH (17)
 Hiltop Wires Inc 1200 Shames Dr Westbury NY (13-19)

Kaiser Aluminum & Chemical Sales Inc 1924 Broadway Oakland Calif (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20)
 Kellogg Switchboard & Supply Co 79 W Monroe St Chicago 3 Ill (19)
 Kennecott Wire & Cable Co Phillipsdale (Rumford 16) RI (7-13-16-19)

Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio (23)
 Lowell Insulated Wire Corp P O Box 260 Pawtucket RI (6-19)
 Markel (L Frank) & Sons Norristown Pa (25)
 Narragansett Wire Co 541 Pawtucket Ave Pawtucket RI (1-3-6-10-17-18)
 National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (2-6-10-14-17-18-19-21)
 New England Electrical Works Inc 365 Main St Lisbon NH (9-10-13-19)
 Nichols Wire & Aluminum Co 1725 Rockingham Rd Davenport Iowa (26)
 Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY (14)
 Okonite Co Passaic NJ (1-5-6-7-8-9-10) (12 thru 21)

Page Steel & Wire Div American Chain & Cable Co Inc P O Box 692 Monessen Pa (23)
 Parantire Wire & Cable Div Essex Wire Corp Marion Ind (1-2-3-4-6-8-9-10-11-12-15-17-18-19-20)
 Patrick & Wilkins Co 51 N Seventh St Phila 6 Pa (19-20)
 Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (2-6-8-19)
 ●PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (1-2-3-6-9-10-13-15-17-18-19)—ADV PG 114-115

Plastic Wire & Cable Corp E Main St Jewett City Conn (2-3-6-8-9-15-19-20)
 Plastoid Corp 42-61 24th St L I C 1 NY (2-6-9-12-19-20)
 Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (2-3-6-7-10-11-12-19-20-32-34)
 Reynolds Metals Co Richmond 18 Va (6-10-17-19)
 Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI (2-11-12-19)
 Ringsdorf Carbon Corp Box 22 East McKeesport Pa (27)
 Rockbestos Products Corp Nicol and Canner Sts New Haven 4 Conn (2-6-7-8-19-21)

Roebbing's (John A) Sons Corp 640 S Broad St Trenton 2 NJ (1-6-7-8-10-13-15-16-17-18-19-21)
 ●ROME CABLE CORP 421 Ridge St Rome NY (1-2-3-6-8-10-12 thru 20-23)—ADV PG 76 thru 81
 ●ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (2-4-6-9-11-12-19-20-22-28)—ADV PG 122
 Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (22)
 Sequola Wire & Cable Co 2201 Bay Rd (P O Box 1007) Redwood City Calif (2-6-19-20)
 Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (19)
 Sittler Corp 18 N Ada St Chicago 7 Ill (10-19)
 South River Metal Products Co Inc 377 Turnpike South River NJ (10)
 Southwire Co Carrollton Ga (3-6-10-17-19)
 Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (2-11-12)

Supremant Mfg Co 199 Washington St Boston 8 Mass (2-6-19)
 Telcon P O Box 216 Pacific Palisades Calif (19-21)
 Tensolite Insulated Wire Co Inc West Main St Tarrytown NY (2-6-13-14)
 Times Wire & Cable Co Wallingford Conn (2-12)
 ●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1-2-6-15 thru 19-29 thru 33)—ADV PG 129

Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (2-6-12-19)
 Walker Brothers End St Conshohocken Pa (6-18-19)
 Wattetridge Co 19629 West Lake Rd Rocky River 16 Ohio (24)
 Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (2-4-6-8-10-13-15-17-18-20)
 ●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 488) Pittsburgh 30 Pa (1 thru 21)—ADV PG 22 and COVER
 Whitney Blake Co 102 Pershing St New Haven 14 Conn (6-10-16-19)

Lowell Insulated Wire Corp P O Box 260 Pawtucket RI (6-19)
 Markel (L Frank) & Sons Norristown Pa (25)
 Narragansett Wire Co 541 Pawtucket Ave Pawtucket RI (1-3-6-10-17-18)

National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (2-6-10-14-17-18-19-21)
 New England Electrical Works Inc 365 Main St Lisbon NH (9-10-13-19)
 Nichols Wire & Aluminum Co 1725 Rockingham Rd Davenport Iowa (26)
 Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY (14)
 Okonite Co Passaic NJ (1-5-6-7-8-9-10) (12 thru 21)

Page Steel & Wire Div American Chain & Cable Co Inc P O Box 692 Monessen Pa (23)
 Parantire Wire & Cable Div Essex Wire Corp Marion Ind (1-2-3-4-6-8-9-10-11-12-15-17-18-19-20)
 Patrick & Wilkins Co 51 N Seventh St Phila 6 Pa (19-20)
 Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (2-6-8-19)

●PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (1-2-3-6-9-10-13-15-17-18-19)—ADV PG 114-115
 Plastic Wire & Cable Corp E Main St Jewett City Conn (2-3-6-8-9-15-19-20)
 Plastoid Corp 42-61 24th St L I C 1 NY (2-6-9-12-19-20)
 Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (2-3-6-7-10-11-12-19-20-32-34)

Reynolds Metals Co Richmond 18 Va (6-10-17-19)
 Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI (2-11-12-19)
 Ringsdorf Carbon Corp Box 22 East McKeesport Pa (27)
 Rockbestos Products Corp Nicol and Canner Sts New Haven 4 Conn (2-6-7-8-19-21)

Roebbing's (John A) Sons Corp 640 S Broad St Trenton 2 NJ (1-6-7-8-10-13-15-16-17-18-19-21)
 ●ROME CABLE CORP 421 Ridge St Rome NY (1-2-3-6-8-10-12 thru 20-23)—ADV PG 76 thru 81
 ●ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (2-4-6-9-11-12-19-20-22-28)—ADV PG 122

Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (22)
 Sequola Wire & Cable Co 2201 Bay Rd (P O Box 1007) Redwood City Calif (2-6-19-20)
 Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (19)
 Sittler Corp 18 N Ada St Chicago 7 Ill (10-19)
 South River Metal Products Co Inc 377 Turnpike South River NJ (10)
 Southwire Co Carrollton Ga (3-6-10-17-19)

Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (2-11-12)
 Supremant Mfg Co 199 Washington St Boston 8 Mass (2-6-19)
 Telcon P O Box 216 Pacific Palisades Calif (19-21)
 Tensolite Insulated Wire Co Inc West Main St Tarrytown NY (2-6-13-14)

Times Wire & Cable Co Wallingford Conn (2-12)
 ●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1-2-6-15 thru 19-29 thru 33)—ADV PG 129
 Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (2-6-12-19)
 Walker Brothers End St Conshohocken Pa (6-18-19)
 Wattetridge Co 19629 West Lake Rd Rocky River 16 Ohio (24)

Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (2-4-6-8-10-13-15-17-18-20)
 ●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 488) Pittsburgh 30 Pa (1 thru 21)—ADV PG 22 and COVER
 Whitney Blake Co 102 Pershing St New Haven 14 Conn (6-10-16-19)

Lowell Insulated Wire Corp P O Box 260 Pawtucket RI (6-19)
 Markel (L Frank) & Sons Norristown Pa (25)
 Narragansett Wire Co 541 Pawtucket Ave Pawtucket RI (1-3-6-10-17-18)

National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (2-6-10-14-17-18-19-21)
 New England Electrical Works Inc 365 Main St Lisbon NH (9-10-13-19)
 Nichols Wire & Aluminum Co 1725 Rockingham Rd Davenport Iowa (26)
 Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY (14)
 Okonite Co Passaic NJ (1-5-6-7-8-9-10) (12 thru 21)

Page Steel & Wire Div American Chain & Cable Co Inc P O Box 692 Monessen Pa (23)
 Parantire Wire & Cable Div Essex Wire Corp Marion Ind (1-2-3-4-6-8-9-10-11-12-15-17-18-19-20)
 Patrick & Wilkins Co 51 N Seventh St Phila 6 Pa (19-20)
 Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (2-6-8-19)
 Phelps Dodge Copper Products Corp 300 Park Ave New York 22 NY (1-2-3-6-9-10-13-15-17-18-19)—ADV PG 114-115

Plastic Wire & Cable Corp E Main St Jewett City Conn (2-3-6-8-9-15-19-20)
 Plastoid Corp 42-61 24th St L I C 1 NY (2-6-9-12-19-20)
 Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (2-3-6-7-10-11-12-19-20-32-34)
 Reynolds Metals Co Richmond 18 Va (6-10-17-19)
 Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI (2-11-12-19)
 Ringsdorf Carbon Corp Box 22 East McKeesport Pa (27)
 Rockbestos Products Corp Nicol and Canner Sts New Haven 4 Conn (2-6-7-8-19-21)

Roebbing's (John A) Sons Corp 640 S Broad St Trenton 2 NJ (1-6-7-8-10-13-15-16-17-18-19-21)
 ●ROME CABLE CORP 421 Ridge St Rome NY (1-2-3-6-8-10-12 thru 20-23)—ADV PG 76 thru 81
 ●ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (2-4-6-9-11-12-19-20-22-28)—ADV PG 122
 Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (22)
 Sequola Wire & Cable Co 2201 Bay Rd (P O Box 1007) Redwood City Calif (2-6-19-20)

Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (19)
 Sittler Corp 18 N Ada St Chicago 7 Ill (10-19)
 South River Metal Products Co Inc 377 Turnpike South River NJ (10)
 Southwire Co Carrollton Ga (3-6-10-17-19)
 Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (2-11-12)
 Supremant Mfg Co 199 Washington St Boston 8 Mass (2-6-19)
 Telcon P O Box 216 Pacific Palisades Calif (19-21)

Tensolite Insulated Wire Co Inc West Main St Tarrytown NY (2-6-13-14)
 Times Wire & Cable Co Wallingford Conn (2-12)
 ●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1-2-6-15 thru 19-29 thru 33)—ADV PG 129
 Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (2-6-12-19)
 Walker Brothers End St Conshohocken Pa (6-18-19)
 Wattetridge Co 19629 West Lake Rd Rocky River 16 Ohio (24)

Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (2-4-6-8-10-13-15-17-18-20)
 ●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 488) Pittsburgh 30 Pa (1 thru 21)—ADV PG 22 and COVER
 Whitney Blake Co 102 Pershing St New Haven 14 Conn (6-10-16-19)

Lowell Insulated Wire Corp P O Box 260 Pawtucket RI (6-19)
 Markel (L Frank) & Sons Norristown Pa (25)
 Narragansett Wire Co 541 Pawtucket Ave Pawtucket RI (1-3-6-10-17-18)

National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (2-6-10-14-17-18-19-21)
 New England Electrical Works Inc 365 Main St Lisbon NH (9-10-13-19)
 Nichols Wire & Aluminum Co 1725 Rockingham Rd Davenport Iowa (26)
 Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY (14)
 Okonite Co Passaic NJ (1-5-6-7-8-9-10) (12 thru 21)

Page Steel & Wire Div American Chain & Cable Co Inc P O Box 692 Monessen Pa (23)
 Parantire Wire & Cable Div Essex Wire Corp Marion Ind (1-2-3-4-6-8-9-10-11-12-15-17-18-19-20)
 Patrick & Wilkins Co 51 N Seventh St Phila 6 Pa (19-20)
 Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (2-6-8-19)
 Phelps Dodge Copper Products Corp 300 Park Ave New York 22 NY (1-2-3-6-9-10-13-15-17-18-19)—ADV PG 114-115

Plastic Wire & Cable Corp E Main St Jewett City Conn (2-3-6-8-9-15-19-20)
 Plastoid Corp 42-61 24th St L I C 1 NY (2-6-9-12-19-20)
 Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (2-3-6-7-10-11-12-19-20-32-34)
 Reynolds Metals Co Richmond 18 Va (6-10-17-19)
 Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI (2-11-12-19)
 Ringsdorf Carbon Corp Box 22 East McKeesport Pa (27)
 Rockbestos Products Corp Nicol and Canner Sts New Haven 4 Conn (2-6-7-8-19-21)

Roebbing's (John A) Sons Corp 640 S Broad St Trenton 2 NJ (1-6-7-8-10-13-15-16-17-18-19-21)
 ●ROME CABLE CORP 421 Ridge St Rome NY (1-2-3-6-8-10-12 thru 20-23)—ADV PG 76 thru 81
 ●ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (2-4-6-9-11-12-19-20-22-28)—ADV PG 122
 Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (22)
 Sequola Wire & Cable Co 2201 Bay Rd (P O Box 1007) Redwood City Calif (2-6-19-20)

Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (19)
 Sittler Corp 18 N Ada St Chicago 7 Ill (10-19)
 South River Metal Products Co Inc 377 Turnpike South River NJ (10)
 Southwire Co Carrollton Ga (3-6-10-17-19)
 Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (2-11-12)
 Supremant Mfg Co 199 Washington St Boston 8 Mass (2-6-19)
 Telcon P O Box 216 Pacific Palisades Calif (19-21)

Tensolite Insulated Wire Co Inc West Main St Tarrytown NY (2-6-13-14)
 Times Wire & Cable Co Wallingford Conn (2-12)
 ●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1-2-6-15 thru 19-29 thru 33)—ADV PG 129
 Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (2-6-12-19)
 Walker Brothers End St Conshohocken Pa (6-18-19)
 Wattetridge Co 19629 West Lake Rd Rocky River 16 Ohio (24)

Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (2-4-6-8-10-13-15-17-18-20)
 ●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 488) Pittsburgh 30 Pa (1 thru 21)—ADV PG 22 and COVER
 Whitney Blake Co 102 Pershing St New Haven 14 Conn (6-10-16-19)

6E. PORTABLE CORD SETS

1. Extension
2. Molded integral
3. Range & dryer
4. Self-coiling & retractable
5. Appliance
6. Remote control

Includes sets with appropriate connecting bodies at both ends. For cords with lamps attached, see "Trouble Lamps" in Index. For cord without connectors, see "Cord"

Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (1-2-3-4)
 Accorn Insulated Wire Co 36 Freeman St Pawtucket RI (1-3)
 American Electric Cable Co 181 Appleton St Holyoke Mass (1)
 Anaconda Wire & Cable Co 25 Broadway New York 4 NY (1-3)
 Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY (1-2)

Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1)
 Associated Engineering Corp 65 Kent St Brookline 46 Mass (1-2)
 B & M Electric Corp 168 7th St Brooklyn 15 NY (1-2-6)
 Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (1-2)

Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (1-2)
 Belden Mfg Co P O Box 5070A Chicago 80 Ill (8-9-10-11-17-18-19-20-21-22-23)
 Chester Cable Corp Oakland Ave Chester NY (8-17-18-20-22)
 Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY (4-5-12-13-14-17-18-19-20-21)
 ●COLLYER INSULATED WIRE CO 249 Roosevelt Ave Pawtucket RI (1 thru 4-7-12 thru 18-20-21-22)—ADV PG 97

Columbia Cable & Electric Corp 255 Chestnut St Brooklyn 8 NY (5)
 Continental Wire Corp

Belden Mfg Co P O Box 5070A Chicago 80 Ill (1-2-3)
 Bell Electric Co 1844-50 W 21 St Chicago 8 Ill (1)
 Benjamin Reel Products Inc 10700 Broadway Cleveland 25 Ohio (4)
 Black (W) Mfg Co 300-08-N Third St Phila 6 Pa (1)
 Cable Electric Products Inc 234 Daboll St Providence 7 RI (1-3-5)
 Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (1)
 Carol Cable Co 190 Middle St Pawtucket RI (1)
 Circle F Mfg Co 720 Monmouth St Trenton 4 NJ (3)
 Cordomatic Div Vacuum Cleaner Corp of America 1724 W Indiana Ave Phila 32 Pa
 Cornish Wire Co Inc 50 Church St NY 7 NY (1-3)
 Crescent Co Inc 20 Central Ave Pawtucket RI (1-2)
 Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (1-2-3-4)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1-2-3)
 Electric-Cord Mfg Co Inc 2554-2568 E 18 St Brooklyn 35 NY (5)
 Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio (1-2)
 Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (1)
 General Cable Corp 420 Lexington Ave NY 17 NY (1-2-3-4)
 General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-3)
 General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1-2-3)
 General Insulated Wire Works Inc 69 Gordon Ave Providence 5 RI (1-2-4)
 Haft & Sons Inc 950 Kent Ave Brooklyn 5 NY (1)
 Kaiser Aluminum & Chemical Sales Inc 1924 Broadway Oakland Calif (1-2-3-4)
 Koiled Kords Inc Box K Hamden Conn (4)
 Lowell Insulated Wire Corp PO Box 260 Pawtucket RI (1)
 Midwest Electric Products Inc 1515 N Front St Mankato Minn (3)
 Murray (D A) Co Inc 632 N Mill St Tipton Ind (1-2)
 Okonite Co Passaic NJ (1-2)
 Parantite Wire & Cable Div Essex Wire Corp Marion Ind (3)
 Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (1-2-3)
 Phelps Dodge Copper Products Corp 300 Park Ave New York 22 NY (1)
 Plastic Wire & Cable Corp E Main St Jewett City Conn (1-2-3-4)
 Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI (1)
 Riverside Mfg & Electrical Supply Co 10228 Michigan Ave Dearborn Mich (2)
 Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (1-3)
●ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (1-3)—ADV PG 122
 Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (2)
 Sperti Faraday Inc 1322 E Church St Adrian Mich (1-2)
 Standard Portable Cord Co Inc Mayville NY (1)
 Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (1-3)
 Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (2)
 Wilkoff (M J) Co 823 Locust Pittsburgh 19 Pa (3)

6F. CONNECTING & TERMINATING DEVICES

1. Connectors—pressure
2. Connectors—solderless
3. End seals
4. Lugs & terminals
5. Pinheads
6. Splices, kits & equipment
7. Terminal blocks & binding posts
8. Screw-on wire connectors
9. Collecting rings & shoes
10. Ground clamps
11. Welding cable connectors
12. Lifting magnet connectors
13. Environment-resistant connectors
14. Tube-to-cable connectors

Accessories used for splicing, terminating, or connecting wire and cable to equipment or fittings.

AMP Inc Eisenhower Blvd Harrisburg Pa (1-4-6)
 Adaleit Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (3-5)
 Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (7)
 Allied Industries Inc PO Box 119 Ogallala Neb (3)
 Anasconda Wire & Cable Co 25 Broadway New York 4 NY (5-6)
 Anderson Electric Corp PO Drawer 2151 Birmingham 1 Ala (1-3-4-6-10)
 Anthony (F M) Co 773 University Ave Berkeley 10 Calif (1-4-6)
 Blackburn (Jasper) Corp 1525 Woodson Rd St Louis 14 Mo (1-4-6)

Blaco Mfg Co 6541 Euclid Ave Cleveland 3 Ohio (9-10)
●BUCHANAN ELECTRICAL PRODUCTS CORP 420 US Route 22 Hillside NJ (1-4-6-7)—ADV PG 150-152
 Burndy Corp Norwalk Conn (1-4-6-7-8)
 Cam-Lok Div Empire Products Inc 9201 Blue Ash Rd (Box 98) Cincinnati 36 Ohio (1-4-6)
 Camblock Corp 825 Bronx River Ave New York 72 NY (7)
 Central Porcelain Co 507 Railroad St Columbiana Ohio (1-8)
 Crouse-Hinds Co Syracuse 1 NY (13)
 Curtis Development & Mfg Co 3244 N 33 St Milwaukee 16 Wis (7)
 Dante Electric Mfg Co Bantam Conn (1-4)
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (1-3-4-5-9)
 Dessert Mfg Corp 249-255 Huron St Brooklyn 22 NY (1-4-6)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (8)
 Earl (H W) & Co 6225 SW 8th St Miami 44 Fla (11-12)
 Eastern Specialty Co 3617 N 8th St Phila 40 Pa (7)
 Electrix Terminals & Connectors Inc 990 E 67 St Cleveland 3 Ohio (1-4)
 Elliott Electric Products Co 1513 Olmstead Ave New York 62 NY (1-3-4-6-8)
 Emerson Plastics Corp 1383 Seabury Ave Bronx 63 NY (7)
●ERICO PRODUCTS INC 2070 E 61 Pl Cleveland 3 Ohio (1-4-11)—ADV PG 136-137
 Esco Mfg Co PO Box 1039 Greenville Texas (5)
 Fargo Mfg Co Inc 845 Main St Poughkeepsie NY (1)
 Frankel Connector Co 27 Vestry St NY 13 NY (1-4)
●G & W ELECTRIC SPECIALTY CO 3500 W 127 St Blue Island Ill (3-5-6)—ADV PG 99
 General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1-4)
 General Products Corp 107 Salem St Union Springs NY (7)
 Hi-Scale Products Corp 132 W 22nd St NY 11 NY (8)
 Hollingsworth Co Solderless Terminal Div Box 430 Phoenixville Pa (1-4)
 Holub Industries Inc 442 Elm St Sycamore Ill (1)
 Husky Products Inc 5300 Vine St Cincinnati 17 Ohio (6)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (8)—ADV PG 67-68-69-70
 Ilasco Corp 4730 Madison Rd Cincinnati 27 Ohio (1-7)
 Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (1-6)
 Joy Mfg Co H W Oliver Bldg Pittsburgh 22 Pa (1-5-6)
 Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (1-3-5)
 Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (1)
 Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill (4-6-7)
 Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (1-4-7)
 Krueger & Rudephol Inc 1041 Evans St Cincinnati 4 Ohio (1-4)
 Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (1-4-7)
 Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-6)
 Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (1)
 M & W Electric Mfg Co Inc S Walnut St (PO Box 87) East Palestine Ohio (10)
 Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (8)
 Marathon Special Products Corp 12th & Cranberry Sts Erie Pa (7)
 Marshall (John) Associates Inc Box 2463 Bridgeport 8 Conn (1-7)
 Mend-it Sleeve Mfg Co 3125 Gloria Terrace Lafayette Calif (1)
 Metalelectrics Inc 677 Broadway NY 12 NY (1-2-8)
 Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill (1)
 Minnesota Mining and Mfg Co Electrical Products Div 900 Bush Ave St Paul & Minn (1-6)
 National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (1-7)
●O Z ELECTRICAL MFG CO INC 262 Bond St Brooklyn 17 NY (1-4-10-14)—ADV PG 116
 Ohio Brass Co 380 N Main St Mansfield Ohio (5)
 Okonite Co Passaic NJ (6)
●PLW PRODUCTS INC 3871 W 150 St Cleveland 11 Ohio (5-6)—ADV PG 146
 Pekcu Co 1227 McDonald Ave Brooklyn 30 NY (1-6)
 Penn-Union Electric Corp 315 State St Erie Pa (1-4-6-7)
 Porcelain Products Co 224 N Patterson St Carey Ohio (1-10)
 Preformed Line Products Co 5349 St Clair Ave Cleveland 3 Ohio (6)
 Rattan Mfg Co 10 Wall St (P O Box 1745) New Haven 7 Conn (1)
 Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (3)
 Richards Mfg Co Ltd 25 Rankin St Newark 3 NJ (1-4-6)
 Ringsdorf Carbon Corp Box 22 McKeesport Pa (9)
 Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (1-4-5-6)

Sherman (H B) Mfg Co 22 Barney Battle Creek Mich (1)
 Southern Electrical Equipment Co 308 W Bland at Mint St Charlotte 3 NC (1)
 Standard Electric Time Co 89 Logan St Springfield 2 Mass (7)
 Stur-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (8)
 States Co 19 New Park Ave Hartford 6 Conn (7)
 Superior Electric Co 83 Laurel St Bristol Conn (7)
 Suprenant Mfg Co 199 Washington St Boston 8 Mass (3)
 Suttle Equipment Corp 135 S LaSalle St Chicago 3 Ill (7)
 Thomas & Betts Co 36 Butler St Elizabeth 1 NJ (1-4-6-8)
 Vaco Products Co 317 E Ontario St Chicago 11 Ill (7)
 Wama Co Industrial Bldg Baltimore 2 Md (7)
 Watteredge Co 19629 West Lake Rd Rocky River 16 Ohio (4)
●WEAVER (J A) CO 2110 Howard St St Louis 6 Mo (1)—ADV PG 168
 Yorkville Metal Products Co 677 Broadway NY 12 NY (1-8)

6G. CONDUCTOR SUPPORTS

1. Bushings & insulators
2. Open wiring cleats, knobs & tubes
3. Hangers & grips
4. Racks & framing
5. Staples, clamps & clips
6. Trays
7. Troughs
8. Drive & bridle rings
9. Cable ties
10. Cable spacers

Accessories for holding wire and cable in place from source to load. See also "Receivers."

Adaleit Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (1)
 Allis-Chalmers Mfg Co 930 S 70 St Milwaukee 1 Wis (3)
 American Steel & Iron Works 5801 S Lowe Ave Chicago 21 Ill (4)
 Anderson Electric Corp P O Drawer 2151 Birmingham 1 Ala (5)
●ARROW FASTENER CO INC 1 Junius St Brooklyn 12 NY (5)—ADV PG 132
 Atlas Tack Corp Pleasant & South Sts Fairhaven Mass (5)
 Buchanan Electrical Products Corp 420 US Route 22 Hillside NJ (5)
 Cable Electric Products Inc 234 Daboll St Providence 7 RI (5)
 Carson Mfg Co 2565 W Fullerton Ave Chicago 47 Ill (5)
 Central Porcelain Co 507 Railroad St Columbiana Ohio (2)
 Chalfant Products Co Inc 11525 Madison Ave Cleveland 2 Ohio (4-6-7)
●COPE (T J) DIV ROME CABLE CORP Third & Walnut Sts Collegeville 5 Pa (4-7)—ADV PG 85-87
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (2-3-6-7)
 Efficiency Electric & Mfg Co Park Ave Ext P O Box 30 East Palestine Ohio (1-2-4)
 Electrowest Inc 124 E 40 St New York 16 NY (5-9)
 Eliza Metal Products Co Box 408 Bridgeville Pa (7)
 Elliott Electric Products Co 1513 Olmstead Ave New York 62 NY (1)
●ERICO PRODUCTS INC 2070 E 61 Place Cleveland 3 Ohio (5)—ADV PG 136-137
 Fasform Div Heller Roberts Mfg Corp 6115 Carnegie Ave Cleveland 1 Ohio (8)
●FULLMAN MFG CO 1209-1215 Jefferson St Latrobe Pa (5)—ADV PG 102
 General Metals Inc 858 Goldsboro Greensboro NC (7)
 Glasic Corp 4321 Glenridge Rd Cleveland 21 Ohio (1)
 Handy Angle Div Lug-All Co 355 Lancaster Ave Haverford Pa (4)
 Heyman Mfg Co Kenilworth 20 NJ (1)
 Holub Industries Inc 442 Elm St Sycamore Ill (5)
●HUSKY PRODUCTS INC 5300 Vine St Cincinnati 17 Ohio (3 thru 7)—AD PG 127
●JOHNS-MANVILLE 22 E 40 St New York 16 NY (6)—ADV PG 159
 Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (1)
 Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill (2)
 Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (2)
 Leibfried (C H) Mfg Corp 95-101 Guernsey St Brooklyn 22 NY (3-4)
 Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (4)
 Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (2)
 M & T Welding Products Corp 703 37th Ave Oakland Calif (4)
 M & W Electric Mfg Co Inc S Walnut St (PO Box 87) East Palestine Ohio (4)

Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (8)
 Metalelectrics Inc 677 Broadway NY 12 NY (1)
 Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill (5)
 ●MINERALALL ELECTRIC CO 25 N Peoria St Chicago 7 Ill (1)—ADV PG 134-155
 O Z Electrical Mfg Co Inc 262 Bond St Brooklyn 17 NY (1)
 P-W Industries Inc 11200 Roosevelt Blvd Philadelphia 15 Pa (4-7)
 Palmer Electric & Mfg Co 24 Water St Wakefield Mass (7)
 Porcelain Products Co 224 N Patterson St Carey Ohio (2)
 Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (1)
 Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (2)
 Rome Cable Corp 421 Ridge St Rome NY (10)
 Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (5)
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY (1)
 Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (5)
 Steel City Electric Co 1207 Columbus Ave Pittsburgh 33 Pa (1-2-3-4-5)
 Superior Porcelain Co 931 1/2 Market St Parkersburg W Va (1)
 Superior Staple Mfg Co 40 Commercial St Fitchburg Mass (5)
 TA Mfg Corp 4607 Alger St Los Angeles 39 Calif (1)
 ●THIEL TOOL & ENGINEERING CO 1417 N Market St St Louis 6 Mo (5)—ADV PG 164
 Thomas & Betts Co Inc 36 Butler St Elizabeth 1 NJ (9)
 Titchener (E H) & Co 67 Clinton St Binghamton NY (5)
 Unistrut Products Co 933 Washington Blvd Chicago 7 Ill (4)
 Wadsworth Electric Mfg Co Inc 20-34 W 11 St (Box 272) Covington Ky (7)

6H. BUSBAR & SUPPORTS

For switchboards, substations and similar applications. For enclosed busbar see "Busways."

Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa.
 Anderson Electric Corp P O Drawer 2151 Birmingham 1 Ala
 Burndy Corp Norwalk Conn
 Chase Brass & Copper Co Inc 236 Grand St Waterbury 20 Conn
 Dessert Mfg Corp 249-255 Huron St Brooklyn 22 NY
 Electric Materials Co Box 390 North East Pa
 Erica Products Inc 2070 E 61 St Cleveland 3 Ohio
 General Electric Co Apparatus Sales Div Schenectady 5 NY
 Memco Engineering & Mfg Co Inc Commack LI NY

●O Z ELECTRICAL MFG CO INC 262 Bond St Brooklyn 17 NY—ADV PG 116
 Penn-Union Electric Corp 315 State St Erie Pa
 ●POWERCRAFT CORP 2215 De Kalb St St Louis 4 Mo—ADV PG 161
 Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio
 Reverse Copper & Brass Inc 230 Park Ave NY 17 NY
 Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich
 Southern Electrical Equipment Co 308 W Bland at Mint St Charlotte 3 NC
 Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo

6J. CONDUCTOR RAILS

Ringsdorff Carbon Corp Box 22 McKeesport Pa

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
6-1	Electronic Wire and Cable; 35p; Cat. No. 58 (Alpha)
6-2	Aluminum In Electrical Systems; 34p (Aluminum Co.)
6-3	Durasheath All-Purpose Rubber Power Cable; 32p (Anaconda)
6-4	Flexible Cords, Wires and Cables; 8p (Apex)
6-5	Lead Wires; 8p; Cat. No. 358 (Belden)
6-6	Wire and Cable Lugs and Fittings; 80p; Cat. No. 858 (Blackburn)
6-7	ThermOweld Electrical Connections; 18p; Cat. No. TH-9 (Burndy)
6-8	Bus Conductor Handbook; 8p; Cat. No. B-2 (Chase)
6-9	Copper Bus Conductor Handbook; 104p (Chase)
6-10	Ark-trol Electrical Connectors; 46p; Cat. No. 2711 (Crouse-Hinds)
6-11	Cadweld Electrical Connections; 104p (Erico)
6-12	Anchors, Connectors, Straps and Tools; 32p; Cat. No. 100 (Holub)
6-13	Support Systems for Power Cables; 10p; Cat. No. 1031 (Husky)
6-14	Isolated Phase Bus; 22p; Cat. No. 2604-1A (I-T-E)
6-15	Cable Vulcanizers & Supplies; 16p; Cat. No. 870 (Joy)
6-16	Electrical Connectors for Industry; 12p; Cat. No. 873 (Joy)
6-17	Insulated Aluminum Conductors, Design and Installation; 72p (Kaiser)
6-18	Laytex Portable Cord; 24p (Kaiser)
6-19	Laytex Resin Control Cables; 16p (Kaiser)
6-20	Power and Lighting Cable; 16p (Kaiser)
6-21	Service Entrance Cable; 8p (Kaiser)
6-22	Splicing Multiple-Conductor Control Cables; 12p (Kaiser)
6-23	Splicing Rubber-Insulated Neoprene-Jacketed Power and Control Cables; 34p (Kaiser)
6-24	Splicing Thermoplastic Power and Control Cables; 24p (Kaiser)
6-25	Compression Fittings and Tools; 18p (Kearney)
6-26	Terminal Blocks; 16p (Marathon)
6-27	Electrical Wire and Cable; 16p; Cat. No. 1105A (Okonite)
6-28	Wire and Cable; 46p; Cat. No. P2 (Plastoid)
6-29	Current Collectors; 28p; Cat. No. A3a (Ringsdorff)
6-30	Cathodic Protection Cables; 4p; Cat. No. RCP 1110 (Rome)
6-31	Flame-Retardant Polyethylene for Wire and Cable; 12p; Cat. No. RCT 710 (Rome)
6-32	High Voltage Mine Power Feeder Cables; 6p; Cat. No. RCP-751 (Rome)
6-33	Interlocked Armored Power Cables; 12p; Cat. No. RCP 730 (Rome)
6-34	Neutral-Supported Secondary and Service Drop Cables; 8p; Cat. No. RCP-361 (Rome)
6-35	PVC Insulated Leads for Oil-Filled Transformers; 8p; Cat. No. RCT 320 (Rome)
6-36	Trimline Primary Distribution System; 20p; Cat. No. RCP-790 (Rome)
6-37	Clamps and Straps; 16p; Cat. No. 500 (Victor)

SECTION 7. RACEWAY AND FITTINGS

Raceway tools are listed in Section 12. Trays and troughs and other conductor supports are listed in Section 6.

7A. AUXILIARY GUTTERS

For increasing size of cabinets and panels to provide additional wiring room.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo
 Alwalt Mfg Co 1706 Lapham Dr Modesto Calif
 Burns (James F) Co 705-715 Cherry St Philadelphia 6 Pa
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill
 General Metals Inc 858 Goldsboro Greensboro NC
 Hoffman Engineering Corp 1050 Tyler St Anoka Minn
 Keystone Mfg Co 23328 Sherwood Rd Warren Mich
 National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa
 Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif
 Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky
 Square D Co 6060 Rhoad St Detroit 11 Mich
 Sun Electric Products Inc 28 S Day St Orange NJ

●WADSWORTH ELECTRIC MFG CO INC 20-34 W 11th St (Box 272) Covington Ky—ADV PG 163-165
 Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa
 Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo
 Zinsco Electrical Products 729 Turner Los Angeles 12 Calif

7B. BUSWAY

1. Low-impedance feeder
2. Plug-in
3. Current-limiting
4. Trolley duct

Metal-enclosed busbars for exposed wiring installation. Trolley type incorporates bus or conductors accessible to sliding shoes or connectors for power feed.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (1-2)
 Bulldog Electric Products Div I-T-E Circuit Breaker Co 7610 Joseph Campau Detroit Mich (1-2-4)
 Calvert Co 19851 Ingersoll Dr Rocky River 16 Ohio (1)
 Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio (1-2)
 Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (4)
 Electric Distribution Products Inc 2200 31st St S W Allentown Pa (2)

●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (2-3-4)—ADV PG 90-91
 Feedrail Corp 125 Barclay St NY 7 NY (4)
 ●GENERAL ELECTRIC CO DISTRIBUTION ASSEMBLIES DEPT 41 Woodford Ave Plainville Conn (1-2-3-4)—ADV PG 100-101
 Insul-8-Corp 1369 Industrial Rd San Carlos Calif (1-2-4)
 National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (1-2)
 Ringsdorff Carbon Corp Box 22 East McKeesport Pa (4)
 Square D Co 6060 Rivard St Detroit 11 Mich (1-2-3)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (1-2-3)
 ●WESTINGHOUSE ELECTRIC CORP STANDARD CONTROL DIV Beaver Pa (1-2-3) ADV PG 75
 Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3)
 Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1)
 Zinsco Electrical Products 729 Turner Los Angeles 12 Calif (1-2)

7C. CELLULAR FLOOR RACEWAY SYSTEMS

1. Metallic
2. Non-metallic
3. Concrete
4. Complete adjustable floors

Systems which permit use of structural materials for enclosing electrical conductors.

Ceco Steel Products Corp. 5601 W 26 St Chicago 50 Ill (1)
 Condufor Corp. 13560 Lorain Ave (PO Box 2748) Cleveland 11 Ohio (3)
 General Electric Co Construction Materials Div Conduit Products Dept 1285 Boston Ave Bridgeport 2 Conn (1)
 Howard Electric Co 1950 Ruby St Melrose Park Ill (1)
 National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (1)
 Unistrut Products Co 933 Washington Blvd Chicago 7 Ill (4)
 Walker Brothers End St Conshohocken Pa (1)

7D. CONDUIT & DUCT

1. Aluminum
2. Asbestos-cement
3. Clay
4. Fiber
5. Steel
6. Steel, plastic-coated
7. Wrought iron
8. Soapstone
9. Plastic
10. Alloy

For protection of conductors between source and load. For accessories, see "Conduit Fittings."

Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa (1)
 American Hard Rubber Co Ace Rd Butler NJ (9)
 American Metal Moulding Co 146 Colt St Irvington NJ (6)
 Brown Co 150 Causeway St Boston Mass (4)
 Busada Mfg Corp 58-99 54th St Maspeth 78 NY (9)
 Chesflex Corp 684 Nepperhan Ave Yonkers NY (9)
 ●CLIFTON CONDUIT CORP 3300 Eastbourne Ave Baltimore 24 Md (5)—ADV PG 93
 Crescent Plastics Inc 955 Diamond Ave Evansville 7 Ind (9)
 Electric Hose & Rubber Co 12th & Dure Sts Wilmington Dela (9)
 General Electric Co Construction Materials Div Conduit Products Dept 1285 Boston Ave Bridgeport 2 Conn (5-6)
 ●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (5)—ADV PG 4-148
 Industrial Plastic Fittings Co 3891 W 150 St Cleveland 11 Ohio (9)
 ●JOHNS-MANVILLE 22 E 40 St New York 16 NY (2)—ADV PG 159
 Kaiser Aluminum & Chemical Sales Inc 1924 Broadway Oakland Calif (1)
 Kyowa Fibre Pipe Co Ironton Ohio (4)
 Laclede Steel Co Arcade Bldg St Louis 1 Mo (5)
 Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (4)
 Mark (Clayton) & Co 1900 Dempster St Evanston Ill (5)
 Natco Corp 327 Fifth Ave Pittsburgh 22 Pa (3)
 National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (5)
 National Supply Co Tubular Div Two Gateway Center (PO Box 416) Pittsburgh 30 Pa (5)
 National Tube Div U S Steel Corp 525 William Penn Pl Pittsburgh 30 Pa (9)
 Oranburg Mfg Co Inc 375 Park Ave New York 22 NY (4)
 Perma-Pipe Corp PO Box 525 Middleboro Ky (9)
 Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (5)
 Pittsburgh Standard Conduit Co 61 Bridge St Pittsburgh 23 Pa (5)
 Plastiline Inc 2 Intervale St White Plains NY (9)
 Republic Steel Corp Steel And Tubes Div 224 E 131 St Cleveland 8 Ohio (5-6)
 Reynolds Metals Co Richmond 18 Va (1)
 Rome Cable Corp 421 Ridge St Rome NY (1-5)
 Siano Mfg Co 7606 N Cloybourn Ave Sun Valley Calif (9)
 Soapstone Duct Co 3985 Beach St Oakland Calif (8)
 ●SOUTHWESTERN PLASTIC PIPE CO PO Box 117 Mineral Wells Tex (9)—ADV PG 169
 ●STEELDUCT CO Republic Steel Bldg Youngstown Ohio (5)—ADV PG 123
 United States Rubber Co Naugatuck Chemical Div 946 Elm St Naugatuck Conn (9)
 Walker Brothers End St Conshohocken Pa (5)
 Western Plastics Corp 1515 W Second St Hastings Neb (9)
 ●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (5)
 ●YOUNGSTOWN SHEET AND TUBE CO PO Box 900 Youngstown 1 Ohio (5-10)—ADV PG 145

7E. CONDUIT & EMT FITTINGS

1. Connectors
2. Bushings, couplings & locknuts
3. Bushing adapters
4. Conduit bodies & covers
5. Elbows & goosenecks

6. Pulling elbows & adapters
7. Expansion fittings
8. Gaskets
9. Hangers, straps, clamps & supports
10. Markers
11. Nipples & running thread
12. Seals, sealing plugs & compound
13. Service entrance masts, heads & fittings
14. Thread guards
15. Conduit ventilators
16. Deflection fittings
17. Enlargers

Accessories used to join, seal or terminate conduit and electric metallic tubing. See also "Boxes."

Acme Mfg & Gasket Co 738 N 41 St Phila 4 Pa (8)
 Adolet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (2-7-9-12-13)
 Allen-Stevens Conduit Fittings Corp 33-53 62nd St Woodside 77 NY (1-2-3-7-13)
 Apex Bolt Products Co 452-458 N Claremont Ave Chicago 12 Ill (9)
 Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1-2-3-4-9-11-12-13)
 ●ARROLET CORP Foot of Bower St Montgomery Pa (2-3-4-8)—ADV PG 147
 Associated Manufacturers & Distributors Corp, 5015 SE Haig St Portland 6 Ore (1-11)
 Badger Die Casting Corp 201 W Oklahoma Ave Milwaukee 7 Wis (1)
 Blackhawk Industries 250 S Main St Dubuque Iowa (1-2-3-4-9-12-13)
 Bowers Mfg Co Inc 6700 Avalon Blvd Los Angeles 3 Calif (9)
 Brady (W H) Co 727 W Glendale Ave Milwaukee 4 Wis (10)
 ●BRIEDEL METHOD TOOL CO 104 NE First St Galva Ill (1)—ADV PG 89
 Brown Company 156 Causeway St Boston 14 Mass (1-5-6)
 Buchanan Electrical Products Corp 420 U S Route 22 Hillside NJ (2)
 Burndy Corp Newark Conn (1-7)
 Clifton Conduit Corp 3300 Eastbourne Ave Baltimore 24 Md (2-5-11)
 Conduit Fittings Corp 6400 W 66th St Chicago 38 Ill (1-2-5-9-11-13)
 Conduit Nipple Mfg Co 1455 Spring Garden Ave Pittsburgh 12 Pa (2-5-11)
 ●CONDUIT PIPE PRODUCTS CO 157 W Fulton St Columbus 16 Ohio (2-5-11)—ADV PG 98
 ●CROUSE-HINDS CO Syracuse 1 NY (1 thru 9-12-13)—ADV PG 4th COVER
 Diamond Expansion Bolt Co Inc Garwood NJ (9)
 Duro Fittings Co 2210 S Davie Ave Los Angeles 22 Calif (1-2-3-4-9-11-12-13)
 Earl Electric Mfg Corp 35-20 Borden Ave Long Island City NY (1-2-9)
 Efficiency Electric & Mfg Co Park Ave Ext P O Box 30 East Palestine Ohio (9)
 Electric Tube Products 74-16 Grand Ave Maspeth NY (1-2-11)
 Electrical Fittings Corp 37-50 57th St Woodside 77 NY (1-2-4-5-8-9-11-12-13)
 Electrolite Mfg Co 2622 E 51st St Cleveland 4 Ohio (1-2)
 ●ERICO PRODUCTS INC 2070 E 61 Pl Cleveland 3 Ohio (9)—ADV PG 136-137
 ●FULLMAN MFG CO 1209-1215 Jefferson St Latrobe Pa (9)—ADV PG 102
 Gateway Engineering Co 3233 W Grand Ave Chicago 51 Ill (9)
 Gedney Electric Co Americas Bldg Radio City NY 20 NY (1 thru 6-8-9-11-12-13-14)
 General Steel Fittings Co 1321 21st St Racine Wis (2-11)
 ●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1 thru 14)—ADV PG 4-148
 Grinnell Co Inc 260 W Exchange St Providence 2 RI (9)
 Halex Die Casting Co 8640 Bessemer Cleveland 27 Ohio (1-2)
 Hohl Industries Inc 442 Elm St Sycamore Ill (9)
 ●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (17)—ADV PG 67-68-69-70-132-155
 Ideal-Simoleet Fittings Inc 5136 Park Ave Sycamore Ill (4-5-8-9)
 ●JOHNS-MANVILLE 22 E 40 St New York 16 NY (2)—ADV PG 159
 Kaiser Aluminum & Chemical Sales Inc 1924 Broadway Oakland Calif (2-5)
 Kees (F D) Mfg Co 700 Park Ave Beatrice Neb (2)
 Kickhafer Mfg Co 901 S Second St Milwaukee 4 Wis (9)
 ●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (1 thru 6-8-12-13)—ADV PG 119
 Kondu Corp 1040 W 12 St Erie Pa (1-2-4-5)
 Korn (C C) Co P O Box 483 Johnston Pa (9)
 Lebfried (C H) Mfg Corp 95-101 Guernsey St Brooklyn 22 NY (9)
 Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (5-11-12)
 ●LINT (CLYDE W) 2323 W 18 St Chicago 8 Ill (9-12-13)—ADV PG 159
 M & T Welding Products Corp 703 37th Ave Oakland Calif (13)
 ●M & W ELECTRIC MFG CO INC S Walnut St (P O Box 87) East Palestine Ohio (1-9-12-13)—ADV PG 164
 Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (1-2-3-9)
 Mason (L E) Co 98 Business St (Hyde Park) Boston 36 Mass (4-5-8-13)

Marco Industries 207 S Helena St Anaheim Calif (2)
 Mark (Clayton) & Co 1900 Dempster St Evanston Ill (5)
 ●McCAFFREY MFG & SUPPLY CO 1840 W 14 St Chicago 8 Ill (13)—ADV PG 160
 McKinley (Ben P) Co 522 S Clinton St Chicago 7 Ill (2)
 Merwin Mfg Co 19th & German Sts Erie Pa (9)
 Metaltrics Inc 677 Broadway NY 12 NY (1 thru 6-9-11-12-13)
 Metro Casting Co Inc 47 Grattan St Brooklyn 37 NY (1-2)
 Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill (2-5-9-11-13)
 ●MINERALALL ELECTRIC CO 25 N Peoria St Chicago 7 Ill (9-12)—ADV PG 140
 ●MISNER MFG CO INC 202-208 Walton St Syracuse 2 NY (12)—ADV PG 162
 Multi-A-Frame Div Alinsworth Precision Castings Co 1471-77 E Atwater St Detroit 7 Mich (9)
 National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (1-2-5)
 National Supply Co Tubular Div Two Gateway Center (PO Box 416) Pittsburgh 30 Pa (2-5)
 ●OZ ELECTRICAL MFG CO INC 262 Bond St Brooklyn 17 NY (2-7-12)—ADV PG 116
 ●PLM PRODUCTS INC 3671 W 150 St Cleveland 11 Ohio (12-15)—ADV PG 146
 ●PAINE CO Fullerton Ave & Westgate Rd Addison Ill (9)—ADV PG 164-168
 Pipe Coupling Mfrs Inc P O Box 488 Martins Ferry Ohio (2-5-11)
 Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (9)
 Pittsburgh Standard Conduit Co 61 Bridge St Pittsburgh 23 Pa (2-5-11)
 Porcelain Products Co 224 N Patterson St Carey Ohio (13)
 Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (1-2-3-4-5-9-12-13)
 Ramco Mfg Co 540 Westfield Ave W Roselle Park NJ (9)
 Rattan Mfg Co 10 Wall St (PO Box 1745) New Haven 7 Conn (1-2-5-9-11-13)
 Raybestos-Manhattan Inc 61 Willett St Passaic NJ (8)
 Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (2-12)
 Republic Steel Corp Steel And Tubes Div 224 E 131 St Cleveland 8 Ohio (2-5)
 Reynolds Metals Co Richmond 18 Va (2)
 Richards (J R) Co P O Box 482 Carnegie Pa (2-5-9-11-12-13)
 Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (2)
 Roller (Wm G) Inc 159 Liberty Ave Mineola NY (1-2-11-12-13)
 Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (9)
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY (5-12)
 So-Cal Electro Products Inc 4423 W Jefferson Blvd Los Angeles 16 Calif (1)
 ●SPRING CITY ELECTRICAL MFG CO Spring City 85 Pa (7-16)—ADV PG 167
 Steel City Electric Co 1207 Columbus Ave Pittsburgh 33 Pa (1-2-3-6-9-13)
 Steel Electric Products Co Inc 5602 18th Ave Brooklyn 4 NY (1 thru 6-8-9-11 thru 13)
 Steelduct Co Republic Steel Bldg Youngstown Ohio (2-5-11)
 TA Mfg Corp 4607 Alger St Los Angeles 39 Calif (9)
 Thepitt Mfg Co Gregg & Hammond Sts Carnegie Pa (2-3-9-11-12-13)
 Thiel Tool & Engineering Co 1417 N Market St St Louis 6 Mo (9)
 ●THOMAS & BETTS CO 36 Butler St Elizabeth 1 N J (1 thru 6-9-11-13)—ADV PG 120
 Thompson Mfg Co 611 Stevens St Geneva Ill (9)
 Tomic Sales & Engineering Co 20000 Sherwood Ave Detroit 34 Mich (1-2)
 Union Insulating Co Inc Box 351 Parkersburg W Va (2)
 Unistrut Products Co 933 Washington Blvd Chicago 7 Ill (9)
 Utility Service Co Inc 1620 13th St (P O Box 102) Racine Wis (13)
 V V Fitting Co 711 Cherry St Phila 6 Pa (2-7-9-13)
 Victor Specialties 775 Main St New Rochelle NY (9)
 Walker Brothers End St Conshohocken Pa (2-5)
 ●WEAVER (J A) CO 2110 Howard St St Louis 6 Mo (1-2-5-9-13)—ADV PG 168
 Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1 thru 14)
 Yorkville Metal Products Co 677 Broadway NY 12 NY (2-6-9-11-12)
 ●YOUNGSTOWN SHEET AND TUBE CO P O Box 900 Youngstown 1 Ohio (2-5)—ADV PG 145

7F. ELECTRICAL METALLIC TUBING

1. Steel
2. Steel, plastic coated
3. Aluminum

Lightweight conduit; frequently called "EMT" or "Thinwall"

Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa (3)
 ●CLIFTON CONDUIT CORP 3300 Eastbourne Ave Baltimore 24 Md (1)—ADV PG 93

General Electric Co Construction Materials Div
Conduit Products Dept 1285 Boston Ave Bridge-
port 2 Conn (1-2)
Laclede Steel Co Arcade Bldg St Louis 1 Mo (1)
Mark (Clayton) & Co 1900 Dempster St Evanston
Ill (1)
National Electric Div H K Porter Co Inc Porter
Bldg Pittsburgh 19 Pa (1)
National Supply Co Tubular Div Two Gateway
Center (P O Box 416) Pittsburgh 30 Pa (1)
Nikoh Tube Co 5000 S Whipple St Chicago 32
Ill (1)
Pittsburgh Standard Conduit Co 61 Bridge St
Pittsburgh 23 Pa (1)
Republic Steel Corp Steel And Tubes Div 224
E 131 St Cleveland 8 Ohio (1-2)
Steelco Co Republic Steel Bldg Youngstown
Ohio (1)
Marco Industries 207 S Helena St Anaheim
Calif (1)
Walker Brothers End St Conshohocken Pa (1)
●YOUNGSTOWN SHEET AND TUBE CO P O Box 900
Youngstown 1 Ohio (1)—ADV PG 145

7G. FLEXIBLE METALLIC CONDUIT

1. Standard
2. Liquid-tight

Spirally wound steel strip, interlocked to provide flexible enclosure for conductors.

American Metal Moulding Co 146 Coit St Irvington
NJ (1-2)
●ANACONDA METAL HOSE DIV AMERICAN BRASS
CO P O Box 791 Waterbury 20 Conn (2)—
ADV PG 3
●CLIFTON CONDUIT CORP 3300 Eastbourne Ave
Baltimore 24 Md (1)—ADV PG 93
Columbia Cable & Electric Corp 255 Chestnut St
Brooklyn 8 NY (1-2)
●ELECTRI-FLEX CO Roselle III (2)—ADV PG 154
Electrical Fittings Corp 37-50 57th St Woodside
77 NY (1-2)
Etico Wire & Cable Corp 75 Onderdonk Ave
Brooklyn 37 NY (1)
Flexonics Corp 1430 S Third Ave Maywood III
(1-2)
Gedney Electric Co Americas Bldg Radio City
NY 20 NY (1-2)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave
NY 17 NY (1)—ADV PG 4
●INTERNATIONAL METAL HOSE CO Ashford Ave
Bellefonte Ohio (1-2)—ADV PG 157
Kopex Div Gemmer Mfg Co 6400 Mt Elliott Ave
Detroit Mich (1)
National Electric Div H K Porter Co Inc Porter
Bldg Pittsburgh 19 Pa (1)
Thepitt Mfg Co Gregg & Hammon Sts Carnegie
Pa (1)
Thomas & Betts Co 36 Butler St Elizabeth 1
NJ (1-2)
Tomic Sales & Engineering Co 20000 Sherwood
Ave Detroit 34 Mich (1)
Universal Metal Hose Co 2157 S Kedzie Ave
Chicago 23 Ill (1-2)
Wagner Malleable Products Co 222 W Adams St
Chicago 6 Ill (1)

7H. SURFACE RACEWAY

1. Metallic
2. Non-metallic
3. Ground wire moulding
4. Combination raceway & fixture support

5. Combination raceway & multi-outlet system

6. Overfloor duct

For extension of existing concealed wiring, or for complete installation where concealed wiring is unnecessary or impractical.

Hailey (R G) & Co Inc 767 Spitzer Bldg Toledo 4
Ohio (3)
Mitchell Moulding Co 1501 Circle Ave Forest
Park Ill (3)
National Electric Div H K Porter Co Inc Porter
Bldg Pittsburgh 19 Pa (1-5)
Saylor Electric Products Corp 277 Pierce St
Birmingham Mich (2)
●STEEL CITY ELECTRIC CO 1207 Columbus Ave
Pittsburgh 33 Pa (1-4)—ADV PG 125
Versabar Corp 14 Whyte St Jersey City NJ (1)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St
(Box 272) Covington Ky (1)
●WIREMOLD CO Hartford 10 Conn (1-5-6)—ADV
PG 141

7K. UNDERFLOOR DUCT AND DISTRIBUTION SYSTEMS

For concealed passage of conductors beneath floor. For structurally-integrated systems, see "Cellular Floor Raceways."

Gateway Engineering Co 3233 W Grand Ave Chi-
cago 51 Ill
General Electric Co Construction Materials Div
Conduit Products Dept 1285 Boston Ave
Bridgeport 2 Conn
Howard Electric Co 1950 Ruby St Melrose Park
Ill
National Electric Div H K Porter Co Inc Porter
Bldg Pittsburgh 19 Pa
National Supply Co Tubular Div Two Gateway
Center (P O Box 416) Pittsburgh 30 Pa
Orangeburg Mfg Co Inc 375 Park Ave New York
22 NY
Walker Bros End St Conshohocken Pa

7L. WIREWAY

Covered troughs for continuous enclosure of conductors.

Alwalt Mfg Co 1706 Lapham Dr Modesto Calif
Columbia Metal Box Co 260 E 143 St NY 51
NY
Eliza Metal Products Co Box 408 Bridgeville Pa
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St
Newark 5 NJ—ADV PG 90-91
General Electric Co Distribution Assemblies Dept
41 Woodford Ave Plainville Conn
General Metals Inc 858 Goldsboro Greensboro NC
●HOFFMAN ENGINEERING CORP 1050 Tyler St
Anoka Minn—ADV PG 152
●HUENEFELD CO ENGINEERED PRODUCTS DIV
2701 Spring Grove Ave Cincinnati 25 Ohio—ADV
PG 109
●KEYSTONE MFG CO 23328 Sherwood Rd Warren
Mich—ADV PG 149
Meco Metal Box & Panel Mfg Co Inc 2522 W
Huntingdon St Phila 32 Pa
National Electric Div H K Porter Co Inc Porter
Bldg Pittsburgh 19 Pa
Queen Products Co Inc Thirteenth & Rowan Sts
Louisville 3 Ky
Taylor Electric Inc 15400 Dale Detroit 23 Mich

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
7-1	Aluminum Electrical Rigid Conduit; 12p (Aluminum Co.)
7-2	Aluminum in Electrical Systems; 34p (Aluminum Co.)
7-3	Underfloor Distribution Systems for Cellular Steel Floors; 8p (Conduffor)
7-4	Condulets for Corrosive Locations; 16p; Cat. No. 2699 (Crouse-Hinds)
7-5	Uni-Bus Distribution System 28p; (EDP)
7-6	Feeder Electrification and Automatic Pin-Positioning Machine Service Car for Bowling Alleys; 8p; Catalog No. 74 (Feeder)
7-7	Aluminum Plug-In Busway; 24p; Cat. No. GEA-6173 (G-E)
7-8	Flex-A-Power Plug-In Busway; 12p; Cat. No. GEA-6172C (G-E)
7-9	Aluminum Rigid Conduit Installation Data; 6p (Kaiser)
7-10	Wireways & Auxiliary Fittings; 24p; Cat. No. 159-A (Keystone)
7-11	Electrical Wiring Products; 64p; Cat. No. D-36 (Midwest)
7-12	How to Install Spang Headerduct; 24p (National Supply)
7-13	Spang Conduit; 40p; Cat. No. 485 (National Supply)
7-14	Spang Headerduct System; 12p; Cat. No. 492 (National Supply)
7-15	Spang Underfloor Distribution Systems; 8p (National Supply)
7-16	Fibre Conduit; 12p; Cat. No. 52 (Orangeburg)
7-17	Underfloor Duct System; 14p; Cat. No. 202 (Orangeburg)
7-18	Color-Coded Electrical Metallic Tubing; 12p; Cat. No. RCP-900 (Rome)
7-19	Color-Coded Rigid Steel Conduit; 12p; Cat. No. RCP-940 (Rome)
7-20	Combination Duct Systems; 20p; Cat. No. 758 (Walker)
7-21	Raceways, Fittings, Lighting; 144p; Cat. No. 21 (Wiremold)

SECTION 8. MOTORS & GENERATORS

For flexible reference, motors are listed in four classifications: size, design, enclosure, and application.

8A. MOTORS—SIZE

1. Integral horsepower
2. Fractional horsepower
3. Sub-fractional (miniature)

Acro Div Robertshaw-Fulton Controls Co 2040 E
Main St Columbus 16 Ohio (3)
Alliance Mfg Co Inc Lake Park Blvd Alliance
Ohio (3)
Allis (Louis) Co 427 East Stewart St Milwaukee
1 Wis (1)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee
1 Wis (1)
American Electronics Inc 655 West Washington
Blvd Los Angeles 15 Calif (2-3)

Baldor Electric Co 4353 Duncan Ave St Louis 10
Mo (1-2)
Barber-Colman Co P O Drawer 99 Rockford Ill
(3)
Bodine Electric Co 2500 W Bradley Pl Chicago 18
Ill (2-3)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3
NJ (1-2)
Bristol Motor Div Vocalline Co of America Inc
Coulter St Old Saybrook Conn (3)
Brook Motor Corp 3302-4 W Peterson Ave Chicago
45 Ill (1-2)
Century Electric Co 1806 Pine St St Louis 3 Mo
(1-2)
Chandeysson Electric Co 4084 Bingham Ave St
Louis 16 Mo (1)
Cleveland Electric Motor Co 5213 Chester Ave
Cleveland 3 Ohio (1-2)
Continental Electric Co Inc 325 Ferry St Newark 5
NJ (1)
Cramer Controls Corp Main St Centerbrook Conn
(3)
Daimler Co 1375 Clay St Santa Clara Calif
(2-3)
Dayton Electric Mfg Co 126 S Oakley Blvd Chi-
cago 12 Ill (1-2)
Delco Products Div General Motors Corp 329 E
1st St Dayton 1 Ohio (1-2-3)

Diehl Mfg Co 1187 Finderne Ave Somerville NJ
(1-2)
Dumore Co 1300 17th St Racine Wis (2)
Elcor Div F L Jacobs Co 4235 W North Ave Chi-
cago 39 Ill (2-3)
Electra Motors Inc 1110 N Lemon St Anaheim
Calif (1-2)
Electric Indicator Co Inc Camp Ave Springdale
Ill (2-3)
Electric Machinery Mfg Co 800 Central Ave Minne-
apolis 13 Minn (1)
Electric Motors & Specialties Inc King & Hamsher
Sts Garrett Ind (2)
Electric Specialty Co 211 South St Stamford
Conn (1-2)
Electro Dynamic Div General Dynamics Corp 163
Ave A Bayonne NJ (1-2)
Elliott Co Jeannette Pa (1)
Emerson Electric Mfg Co 8100 Florissant Ave St
Louis 21 Mo (1-2)
Fairbanks Morse & Co 600 S Michigan Ave Chicago
5 Ill (1-2)
Fasco Industries Inc Davis & Toppin Sts Rochester
2 NY (2)
Franklin Electric Co Inc 400 E Spring St Bluffton
Ind (1-2)
General Electric Co Apparatus Sales Div Schenec-
tady 5 NY (1-2-3)

Hansen Mfg Co Inc RR No 1 Princeton Ind (3)
Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (1)
Haydon (A W) Co 232 N Elm St Waterbury Conn (3)
Haydon Div General Time Corp 245 E Elm St Torrington Conn (3)
Heinz Electric Co 885 Lawrence St Lowell Mass (3)
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1-2-3)
Holzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (2-3)
Howard Industries Inc 1760 State St Racine Wis (2-3)
Howell Electric Motors Co 409 N Roosevelt Howell Mich (1-2)
Ideal Electric and Mfg Co East First St Mansfield Ohio (1)
Induction Motors Corp 570 Main St Westbury NY (2-3)
International Register Co 2620 W Washington Blvd Chicago 12 Ill (2)
Jack & Heintz Inc 17600 Broadway Cleveland 1 Ohio (1-2)
Janette Electric Mfg Co Lehigh at Main Sts Morton Grove Ill (1-2-3)
Kingston Conley Inc North Plainfield NJ (1-2)
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1)
Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-2)
●LEWIS ELECTRIC CO 1254 W Harrison St Chicago 7 Ill (1-2)—ADV PG 158
Lima Electric Motor Co Inc Findlay Road Lima Ohio (1-2)
Marathon Electric Mfg Corp Wausau Wisc (1-2)
Marble Electric Corp Gladstone Mich (1)
Master Electric Div Reliance Electric & Engineering Co 126 Davis Ave Dayton 1 Ohio (2-1)
Motoresearch Co 1600 Junction Ave Racine Wis (1-2-3)
Newman Electric Motors Inc 357 Wilson Ave Newark 5 NJ (1-2)
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (1-2)
Packard Electric Div General Motors Corp Warren Ohio (2)
Peerless Electric Co 1401 W Market St Warren Ohio (1-2)
Rae Motor Corp 2009 Kewaunee St Racine Wisc (2-3)
Redmond Co Inc 201 Monroe St Owosso Mich (2)
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (1)
Reuland Electric Co 3001 W Mission Rd Alhambra Calif (1-2)
Reynolds Electric Co 3000 River Rd River Grove Ill (2)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1-2-3)
Sangamo Electric Co 11th & Converse Springfield Ill (3)
Shelby Electric Inc East US Highway #421 Shelbyville Ind (1-2)
Small Motors Inc 2076 Elston Ave Chicago 14 Ill (2-3)
Standard Electric Div Standard Dayton Corp PC Box 1001 Dayton 1 Ohio (1-2)
Sterling Electric Motors Inc 5401 Telegraph Rd Los Angeles 22 Calif (1-2)
Sutton (O A) Corp 1812 W Second Wichita Kans (2-3)
System Analyzer Corp 700 W State St Nokomis Ill (1)
Thermador Electrical Mfg Co 5119 District Blvd Los Angeles 22 Calif (2)
United Electric Machinery Co 1824E N 72 Ct Elmwood Park Ill (1-2)
United Pressed Products Co 900 S Desplains St Chicago 7 Ill (2)
U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif (1-2)
Universal Electric Co 300 E Main St Owosso Mich (2-3)
●WAGNER ELECTRIC CORP 6400 Plymouth Ave St Louis 14 Mo (1-2)—ADV PG 143
Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (1 thru 4)
Westinghouse Electric Corp PO Box 868 Pittsburgh 30 Pa (1-2)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)—ADV PG 2nd COVER

8B. MOTORS—DESIGN

1. Direct current
2. Polyphase induction
3. Polyphase synchronous
4. Single phase
5. High frequency

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1 thru 4)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2-3)
American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif (1 thru 4)
Baldor Electric Co 4353 Duncan Ave St Louis 10 Mo (1-2-4)
Barber-Colman Co PO Drawer 99 Rockford Ill (1-4)
Bodine Electric Co 2500 W Bradley Pl Chicago 18 Ill (1-2-3-4)

Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (1-2-4)
Brook Motor Corp 3302-4 W Peterson Ave Chicago 45 Ill (4)
Century Electric Co 1806 Pine St St Louis 3 Mo (1-2-4)
Chandeysson Electric Co 4084 Bingham Ave St Louis 16 Mo (1-2-3)
Cleveland Electric Motor Co 5213 Chester Ave Cleveland 3 Ohio (2)
Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (3)
Continental Electric Co 1234 S Prairie Ave (PO Box 895) Hawthorne Calif (5)
Continental Electric Co Inc 325 Ferry St Newark 5 NJ (1-2-3)
Dalmator Co 1375 Clay St Santa Clara Calif (1-4)
Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill (2-4)
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (1 thru 4)
Diehl Mfg Co 1187 Finner Ave Somerville NJ (2-4)
Lumore Co 1300 17th St Racine Wis (1)
Elcor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-4)
Electra Motors Inc 1110 N Lemon St Anaheim Calif (2-3-4)
Electric Indicator Co Inc Camp Ave Springdale Conn (1 thru 4)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (2-3)
Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind (4-7)
Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio (1-2-3)
Electric Specialty Co 211 South St Stamford Conn (1 thru 4)
Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ (1-2)
Elliott Co Jeannette Pa (1-2-3)
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo (4)
Fairbanks Morse & Co 600 S Michigan Ave Chicago 5 Ill (1 thru 4)
Fasco Industries Inc Davis & Toppin Sts Rochester 2 NY (1-2-3-4-6-7)
Franklin Electric Co Inc 400 E Spring St Bluffton Ind (1-2-4)
General Electric Co Apparatus Sales Div Schenectady 5 NY (1 thru 4)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1 thru 4)—ADV PG 4-138
Hansen Mfg Co Inc RR #1 Princeton Ind (1-4)
Haydon (A W) Co 232 N Elm St Waterbury Conn (1-4)
Heinz Electric Co 685 Lawrence St Lowell Mass (1-4)
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1-2-4)
Holzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (1 thru 4)
Howard Industries Inc 1760 State St Racine Wis (1 thru 4)
Howell Electric Motors Co 409 N Roosevelt Howell Mich (2-4)
Ideal Electric and Mfg Co East First St Mansfield Ohio (1-2-3)
Induction Motors Corp 570 Main St Westbury NY (1)
Jack & Heintz Inc 17600 Broadway Cleveland 1 Ohio (2-4)
Kingston Conley Inc North Plainfield NJ (2-4)
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1 thru 4)
Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-2-4)
●LEWIS ELECTRIC CO 1254 W Harrison St Chicago 7 Ill (1-2)—ADV PG 158
Lima Electric Motor Co Inc Findlay Road Lima Ohio (2-4)
Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio (2)
Marathon Electric Mfg Corp Wausau Wisc (1 thru 4)
Marble Electric Corp Gladstone Mich (1-2)
Master Electric Div Reliance Electric & Engineering Co 126 Davis Ave Dayton 1 Ohio (1 thru 4)
Motoresearch Co 1600 Junction Ave Racine Wis (2-3-4)
Newman Electric Motors Inc 357 Wilson Ave Newark 5 NJ (2-3-4)
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (1-2-4)
Peerless Electric Co 1401 W Market St Warren Ohio (1 thru 4)
Rae Motor Corp 2009 Kewaunee St Racine Wisc (1)
Redmond Co Inc 201 Monroe St Owosso Mich (1)
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (1-2)
Reuland Electric Co 3001 W Mission Rd Alhambra Calif (2-3-4)
Reynolds Electric Co 3000 River Rd River Grove Ill (2-4)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1-2-3-4)
Sangamo Electric Co 11th & Converse Springfield Ill (1-4)
Shelby Electric Inc East US Highway No 421 Shelbyville Ind (2-3-4)
Small Motors Inc 2076 Elston Ave Chicago 14 Ill (1-4)
Standard Electric Div Standard Dayton Corp P O Box 1001 Dayton 1 Ohio (2-4)
Sterling Electric Motors Inc 5401 Telegraph Rd Los Angeles 22 Calif (2-3-4)

Superior Electric Co 83 Laurel St Bristol Conn (4)
Sutton (O A) Corp 1812 W Second Wichita Kans (4)
System Analyzer Corp 700 W State St Nokomis Ill (2-4)
Technical Electronics Corp 4060 Ince Blvd Culver City Calif (4)
United Electric Machinery Co 1824 N 72 Ct Elmwood Park Ill (4)
U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif (2)
Universal Electric Co 300 E Main St Owosso Mich (1-4)
●WAGNER ELECTRIC CORP 6400 Plymouth Ave St Louis 14 Mo (2-3-4)—ADV PG 143
Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (1 thru 4)
Westinghouse Electric Corp PO Box 868 Pittsburgh 30 Pa (1 thru 4)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3-4)—ADV PG 2nd COVER

8C. MOTORS—ENCLOSURE

1. Drip-proof
2. Explosion-proof
3. Splash-proof
4. Weatherproof
5. Hermetic
6. Submersible
7. Totally enclosed

Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio (4)
Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1 thru 7)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2-3-4-7)
Baldor Electric Co 4353 Duncan Ave St Louis 10 Mo (1-2-3-4-7)
Bodine Electric Co 2500 W Bradley Pl Chicago 18 Ill (7)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (1-2-3-4-6-7)
Brook Motor Corp 3302-4 W Peterson Ave Chicago 45 Ill (1-3-4-7)
Cary Electric Co 1806 Pine St St Louis 3 Mo (1 thru 7)
Chandeysson Electric Co 4084 Bingham Ave St Louis 16 Mo (1-3-4)
Continental Electric Co Inc 325 Ferry St Newark 5 NJ (1-2-3-7)
Dalmator Co 1375 Clay St Santa Clara Calif (7)
Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill (1-2-3-7)
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (1-2-5-7)
Diehl Mfg Co 1187 Finner Ave Somerville NJ (1-2-7)
Elcor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-2-3-4-7)
Electra Motors Inc 1110 N Lemon St Anaheim Calif (1-2-3-4-7)
Electric Indicator Co Inc Camp Ave Springdale Conn (1-3-4-6-7)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (1-3-4-7)
Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind (4-7)
Electric Specialty Co 211 South St Stamford Conn (1-2-3-4-6-7)
Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ (1-2-3-4-6-7)
Elliott Co Jeannette Pa (1-2-3-4-7)
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo (1-5)
Fairbanks Morse & Co 600 S Michigan Ave Chicago 5 Ill (1-2-3-4-6-7)
Fasco Industries Inc Davis & Toppin Sts Rochester 2 NY (1-2-3-4-6-7)
Franklin Electric Co Inc 400 E Spring St Bluffton Ind (1-2-3-4-6-7)
General Electric Co Apparatus Sales Div Schenectady 5 NY (1 thru 7)
Hansen Mfg Co Inc RR #1 Princeton Ind (7)
Haydon (A W) Co 232 N Elm St Waterbury Conn (4)
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1)
Holzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (7)
Howard Industries Inc 1760 State St Racine Wis (7)
Howell Electric Motors Co 409 N Roosevelt Howell Mich (1-2-3-4-7)
Ideal Electric and Mfg Co East First St Mansfield Ohio (1-2-3-4-5-7)
Jack & Heintz Inc 17600 Broadway Cleveland 1 Ohio (1-2-3-6-7)
Kingston Conley Inc North Plainfield NJ (1-7)
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1-3-7)
Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-2-6-7)
Lima Electric Motor Co Inc Findlay Road Lima Ohio (1-2-4-7)
Marathon Electric Mfg Corp Wausau Wis (1-2-3-4-5-7)
Marble Electric Corp Gladstone Mich (2-3-4-7)
Master Electric Div Reliance Electric & Engineering Co 126 Davis Ave Dayton 1 Ohio (1-2-3-4-7)
Motoresearch Co 1600 Junction Ave Racine Wis (1-7)

Newman Electric Motors Inc 357 Wilson Ave Newark 5 NJ (1-2-3-4-7)
 Northwestern Electric Co 1750 N Springfield Ave Chicago 47 III (1-3-7)
 Peerless Electric Co 1401 W Market St Warren Ohio (1-2-3-4-6-7)
 Rae Motor Corp 2009 Kewaunee St Racine Wis (7)
 Redmond Co Inc 201 Monroe St Owasco Mich (1-3-7)
 Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (1 thru 7)
 Reuland Electric Co 3001 W Mission Rd Alhambra Calif (1-3-4-7)
 Reynolds Electric Co 3000 River Rd River Grove Ill (1-3)
 Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1-2-3-4-7)
 Shelby Electric Inc East US Highway No 421 Shelbyville Ind (1-3-7)
 Small Motors Inc 2076 Elston Ave Chicago 14 Ill (1-3-4-7)
 Standard Electric Div Standard Dayton Corp P O Box 1001 Dayton 1 Ohio (1-3-4-7)
 Sterling Electric Motors Inc 5401 Telegraph Rd Los Angeles 22 Calif (1-2-3-4-7)
 Sumo Pumps Inc P O Box 983 Stamford Conn (6)
 System Analyzer Corp 700 W State St Nokomis Ill (1-4-7)
 United Electric Machinery Co 1824E N 72 Ct Elmwood Park Ill (1-2-3-4-7)
 U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif (1-2-3-4-7)
 Universal Electric Co 300 E Main St Owasco Mich (1-3-7)
 ●WAGNER ELECTRIC CORP 6400 Plymouth Ave St Louis 14 Mo (1 thru 7)—ADP PG 143
 Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (1 thru 7)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (1-2-3-4-5-7)

8D. MOTORS—APPLICATION

1. Brake
2. Gear
3. Aircraft
4. Automotive
5. Railway
6. Mining
7. Marine
8. Timing
9. Oil burner
10. Elevator
11. Pump
12. Crane & hoist
13. Power tool
14. Sewing machine
15. Instrument
16. Fan
17. Agitator drive

Adams Engineering Co 31711 Solon Rd Solon Ohio (2)
 Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio (8-11-16)
 Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1-2-9 thru 13-16)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (2-7)
 American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif (1-2-3-15-16)
 Balder Electric Co 4353 Duncan Ave St Louis 10 Mo (7)
 Barber-Colman Co P O Drawer 99 Rockford Ill (2)
 Bernina Sewing Machine Co 29 W 35 St NY 1 NY (14)
 Badine Electric Co 2500 W Bradley Pl Chicago 18 Ill (8-11-13-14-15)
 Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (3-5-7-11)
 Bristol Motor Div Vocaline Co of America Inc Coulter St Old Saybrook Conn (8)
 Brook Motor Corp 3302-4 W Peterson Ave Chicago 45 Ill (2-10-11-12)
 Century Electric Co 1806 Pine St St Louis 3 Mo (1-2-7-9-10 thru 14-16)
 Cleveland Electric Motor Co 5213 Chester Ave Cleveland 3 Ohio (1-10-11-12-16)
 Continental Electric Co Inc 325 Ferry St Newark 5 NJ (10-11-12)
 Cramer Controls Corp Main St Canterbury Conn (8)
 Dalmator Co 1375 Clay St Santa Clara Calif (1-2-3-8-16)
 Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (1 thru 7-9-10-16)
 Diehl Mfg Co 1187 Findern Ave Somerville NJ (1-7)
 Dumore Co 1300 17th St Racine Wis (2-15)
 Elcor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-3-5-6-7-11-15-16)
 Electra Motors Inc 1110 N Lemon St Anaheim Calif (1-2-10-11-12-13-16)
 Electric Indicator Co Inc Camp Ave Springdale Conn (1-2-3-5-6-7-8-11-13-15-16)
 Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (6-11-12-16)
 Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind (16)
 Electric Specialty Co 211 South St Stamford Conn (1-2-3)
 Electrical Mfg Co 425 Lake Ave Racine Wis (14)
 Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15)

Elliott Co Jeannette Pa (1-2-9-11-12-16)
 Fairbanks Morse & Co 600 S Michigan Ave Chicago 5 Ill (1-2-5-6-7-9 thru 12-16)
 Falk Corp 3022 W Canal St Milwaukee 1 Wis (2)
 Fasco Industries Inc Davis & Topplin Sts Rochester 2 NY (9-11-16)
 Franklin Electric Co Inc 400 E Spring St Bluffton Ind (2-11-12-13-16)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (1-2-4-5-6-7-9 thru 16)
 Hansen Mfg Co Inc RR No 1 Princeton Ind (8-15)
 Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (12)
 Haydon (A W) Co 232 N Elm St Waterbury Conn (8-15)
 Heinz Electric Co 685 Lawrence St Lowell Mass (2-4-14-16)
 Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (2-8-15)
 Howard Industries Inc 1760 State St Racine Wis (2-3-4-5-8-13-14-15-16)
 Howell Electric Motors Co 409 N Roosevelt, Howell Mich (1-2-10-11-12)
 Ideal Electric and Mfg Co East First St Mansfield Ohio (6-7-11-12-16)
 International Register Co 2620 W Washington Blvd Chicago 12 Ill (8)
 Jack & Helmtz Inc 17600 Broadway Cleveland 1 Ohio (11-12-13-14)
 Janette Electric Mfg Co Lehigh at Main Sts Morton Grove Ill (2)
 Kingston Conley Inc North Plainfield NJ (11-12-13-16)
 Kurz & Root Sales & Engineering Corp 232 East Leland Electric Co Appleton Wis (10)
 Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-11-12-13)
 Lima Electric Motor Co Inc Findlay, Road Lima Ohio (1-2-11-13-16)
 Marathon Electric Mfg Corp Wausau Wisc (6-7-9-11-13-16)
 Marble Electric Corp Gladstone Mich (1-2-6-7-11-12-16)
 Master Electric Div Reliance Electric & Engineering Co 126 Davis Ave Dayton 1 Ohio (1-2-7-10-11-12-13-16)
 Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windmill Aves Phila 44 Pa (15)
 Morse Chain Co Borg Warner Corp Ithaca NY (2)
 Motoresarch Co 1600 Junction Ave Racine Wis (2-3)
 Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (2-3-5-6-7-10-11-12-16)
 Packard Electric Div General Motors Corp Warren Ohio (9-11-13-16)
 Peerless Electric Co 1401 W Market St Warren Ohio (1-6-7-10-11-12-13-16)
 Rae Motor Corp 2009 Kewaunee St Racine Wisc (1-2-14)
 Redmond Co Inc 201 Monroe St Owasco Mich (7-9-11-13-14-16)
 Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (1-2-6-7-10-11-12-13)
 Reuland Electric Co 3001 W Mission Rd Alhambra Calif (1-2-9-10-11-12-16)
 Reynolds Electric Co 3000 River Rd River Grove Ill (16)
 Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (9 thru 13-16)
 Sangamo Electric Co 11th & Converse Springfield Ill (8)
 Shelby Electric Inc East US Highway #421 Shelbyville Ind (1-2-11-12-13-16-17)
 Small Motors Inc 2076 Elston Ave Chicago 14 Ill (9-11-14-16)
 Standard Electric Div Standard Dayton Corp P O Box 1001 Dayton 1 Ohio (1-2-10-11-12-13)
 Sterling Electric Motors Inc 5401 Telegraph Rd Los Angeles 22 Calif (1-2)
 Sumo Pumps Inc P O Box 983 Stamford Conn (11)
 Sutton (O A) Corp 1812 W Second Wichita Kans (16)
 United Electric Machinery Co 1824E N 72 Ct Elmwood Park Ill (1-2)
 U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif (2-3-10-11-16)
 Universal Electric Co 300 E Main St Owasco Mich (9-11-16)
 Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (1-2-3-8-11-15-16)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (1 thru 7-9 thru 13)

8E. GENERATORS

1. Alternating current
2. Direct current
3. High frequency

For changing mechanical energy to electrical energy; often called "dynamos" or "alternators."

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1-2)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2)
 American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif (1)
 Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (1-2)

Century Electric Co 1806 Pine St St Louis 3 Mo (1-2)
 Chandonson Electric Co 4084 Bingham Ave St Louis 16 Mo (1-2)
 Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (1-2)
 Continental Electric Co Inc 325 Ferry St Newark 5 NJ (1-2)
 Crocker-Whitely Div Elliott Co Amers NJ (1-2)
 D & R Ltd 402 E Gutierrez St PO Box 1500 Santa Barbara Calif (1)
 Dalmator Co 1375 Clay St Santa Clara Calif (1-2)
 Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (1-2)
 Elcor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-2)
 Electric Indicator Co Inc Camp Ave Springdale Conn (1-2)
 Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (1)
 Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio (1-2)
 Electric Specialty Co 211 South St Stamford Conn (1-2)
 Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ (2)
 Elliott Co Jeannette Pa (1-2)
 Fairbanks Morse & Co 600 S Michigan Ave Chicago 5 Ill (1-2)
 Fidelity Electric Co Inc 332 N Arch St Lancaster Pa (1)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (1-2)
 Generator Corp Manassas Va (1-2)
 Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1-2)
 Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (1-2)
 Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY (1-2)
 Ideal Electric and Mfg Co East First St Mansfield Ohio (1-2)
 Kato Engineering Co 1442 First Ave Mankato Minn (1)
 Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1-2)
 Lees-Neville Co 1374 E 51 St Cleveland 3 Ohio (1)
 Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-2)
 Marathon Electric Mfg Corp Wausau Wisc (1-2)
 Marble Electric Corp Gladstone Mich (1-2)
 Master Electric Div Reliance Electric & Engineering Co 126 Davis Ave Dayton 1 Ohio (1-2)
 Motoresarch Co 1600 Junction Ave Racine Wis (1-2)
 Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (1-2)
 Onan (D W) & Sons Inc 2515 University Ave SE Minneapolis 14 Minn (1-2)
 Peerless Electric Co 1401 W Market St Warren Ohio (2)
 Rae Motor Corp 2009 Kewaunee St Racine Wisc (2)
 Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1)
 Sangamo Electric Co 11th & Converse Springfield Ill (2)
 Small Motors Inc 2076 Elston Ave Chicago 14 Ill (1-2)
 Welduction Corp 10230 Capital Ave Detroit 37 Mich (3)
 Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (1-2)
 Westinghouse Electric Corp PO Box 868 Pittsburgh 30 Pa (1-2)
 Winchester Corp E Seventh & Division St Sioux City 2 Iowa (1-2)
 Winpower Mfg Co Newton Iowa (1-2)

8F. POWER GENERATING SETS

1. Steam engine powered
2. Steam turbine powered
3. Diesel engine powered
4. Gasoline engine powered
5. Gas turbine powered
6. Mercury turbine powered
7. Balancer sets
8. Motor-driven (M-G sets)

Engine-driven generating plants for providing electricity for power or lighting

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (8)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (2-3-4-7-8)
 Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (3-8)
 Caterpillar Tractor Co Engine Div Abington & N Perry Sts Peoria Ill (3)
 Chandonson Electric Co 4084 Bingham Ave St Louis 16 Mo (3-4-8)
 Chicago Pneumatic Tool Co 6 E 44 St NY 17 NY (3)
 Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (8)
 Copous Engineering Corp 344 Park Ave Worcester 10 Mass (2)
 D & R Ltd 402 E Gutierrez St PO Box 1500 Santa Barbara Calif (2-8)
 Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill (4)
 Detroit Diesel Engine Div General Motors Corp 13400 W Outer Dr Detroit 28 Mich (3)

Elicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (8)
 Electric Indicator Co Inc Camp Ave Springdale Conn (8)
 Electric Power Plants Corp Buffalo St Cadiz Ohio (3-4)
 Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio (8)
 Elliott Co Jeannette Pa (1-2-3-5-8)
 Empire Corp 1566 S 83rd St Milwaukee 14 Wis (3-4)
 Fairbanks Morse & Co 600 S Michigan Ave Chicago 5 Ill (3-4-7-8)
 GM Diesel 13400 W Outer Dr Detroit 28 Mich (3)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (2-3-5 thru 8)
 ●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (8)—ADV PG 4-138
 Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (3)
 Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (7-8)
 Homelite Div Texton Inc 67 Riverdale Ave Port Chester NY (4)
 Howard Industries Inc 1760 State St Racine Wis (4)
 International Fernont Machinery Co Inc Ramapo NY (4-5)
 Jeta Metal Fabricators Inc Yonkers NY (4)
 Kato Engineering Co 1442 First Ave Mankato Minn (8)
 Katolight Corp First Ave at Chestnut (P O Box 891) Mankato Minn (3-4)
 Kohler Co Kohler Wis (3)
 Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (8)
 Marble Electric Corp Gladstone Mich (8)
 Master Electric Div Reliance Electric & Engineering Co 126 Davis Ave Dayton 1 Ohio (8)
 Moon Mfg Co 108 N Jefferson St Chicago 6 Ill (2)
 Motoresearch Co 1600 Junction Ave Racine Wis (4)
 Nordberg Mfg Co 3073 S Chase Ave Milwaukee 1 Wis (3)
 Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (8)
 ●ONAN (D W) & SONS INC 2515 University Ave S E Minneapolis 14 Minn (3-4)—ADV PG 144
 Petter Diesel Engine Div Brush Abee Inc 34-14 58th St Woodside 77 NY (3)
 Pioneer Gen. E. Motor Co 5841 W Dickens St Chicago 39 Ill (3-4)
 Potter & Rayfield Inc P O Box 1042 Atlanta Ga (7)
 Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (2)
 Ready-Power Co 11231 Freud Ave Detroit 14 Mich (3-4)
 Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (8)
 Thor Corp 2115 S 54 Ave Chicago 50 Ill (4)
 Tocco Div Ohio Crankshaft Co 3800 Harvard Ave Cleveland 5 Ohio (8)
 United States Motors Corp 102 W 5th Ave Oshkosh Wisc (3-4)
 Universal Motor Co 438 Universal Dr Oshkosh Wis (3-4)
 Waukesha Motor Co Waukesha Wis (3-4)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (1-2-5-8)
 Wincharger Corp E Seventh & Division St Sioux City 2 Iowa (4)
 Winpower Mfg Co Newton Iowa (3-4)
 Young Engine Corp P O Box 532 Canton Ohio (4)

8G. DYNAMOTORS

Rotating machine for changing dc power from one voltage to another.

Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ
 Carter Motor Co 2711 W George St Chicago 18 Ill
 Continental Electric Co Inc 325 Ferry St Newark 5 NJ
 Delmotor Co 1375 Clay St Santa Clara Calif
 Elicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill
 Electric Specialty Co 211 South St Stamford Conn
 General Electric Co Apparatus Sales Div Schenectady 5 NY
 Heitzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass
 Howard Industries Inc 1760 State St Racine Wis
 Induction Motor Corp 570 Main St Westbury NY
 Sangamo Electric Co 11th & Converse Springfield Ill
 Small Motors Inc 2076 Elston Ave Chicago 14 Ill
 Wagner Electric Corp 6400 Plymouth Ave St Louis 14 Mo
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa

8H. EXCITERS

For providing and maintaining magnetic field of motors or generators.

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis
 American Electronics Inc 635 West Washington Blvd Los Angeles 15 Calif
 Century Electric Co 1806 Pine St St Louis 3 Mo
 Continental Electric Co Inc 325 Ferry St Newark 5 NJ
 Elicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill
 Electric Specialty Co 211 South St Stamford Conn
 Elliott Co Jeannette Pa
 Fairbanks Morse & Co 600 S Michigan Ave Chicago 5 Ill
 General Electric Co Apparatus Sales Div Schenectady 5 NY
 Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio
 Ideal Electric and Mfg Co East First St Mansfield Ohio
 Kato Engineering Co 1442 First Ave Mankato Minn
 Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis
 Marathon Electric Mfg Corp Wausau Wisc
 Master Electric Div Reliance Electric & Engineering Co 126 Davis Ave Dayton 1 Ohio
 Northwestern Electric Co 1750 N Springfield Avenue Chicago 47 Ill
 Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio
 Richardson-Allen Corp 116-15 Fifteenth Ave College Point L I NY
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa

8J. VARIABLE SPEED DRIVES

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis
 Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio
 Lewis-Shepard Products Inc 125 Walnut St Watertown Mass
 Morse Chain Co Borg Warner Corp Ithaca NY
 Reeves Pulley Co 1225 7th St Columbus Ind

Servospeed Div Electro Devices Inc 4 Godwin Ave Paterson NJ
 Sterling Electric Motors Inc 5401 Telegraph Rd Los Angeles 22 Calif
 Tulsa Winch Div Vickers Inc 815 E First St Tulsa 20 Okla
 U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
8-1	Motor Application Guide; 16p; Cat. No. 270A (Century)
8-2	Adjustable Speed Drives; 10p; Cat. No. 60-200 (Electric Products)
8-3	Flange-type Synchronous Motors; 8p; Cat. No. 43-225 (Electric Products)
8-4	Synchronous Motors and Generators; 30p; Cat. No. 43-205 (Electric Products)
8-5	Explosion-Proof Motors; 8p; Cat. No. 1200 (Fairbanks-Morse)
8-6	Totally Enclosed Motors; 8p; Cat. No. 1205 (Fairbanks-Morse)
8-7	Vertical Hollow Shaft Motors; 8p; Cat. No. 1450 (Fairbanks-Morse)
8-8	Motors & Blowers; 16p; Cat. No. 6-59 (Heinze)
8-9	Gearmotors & Speed Reducers; 20p; Cat. No. 5-231 (Janette)
8-10	AC and DC Generators; 8p; Cat. No. 700 (Leland)
8-11	Integral Horsepower Motors; 8p; Cat. No. 10-4A (Leland)
8-12	Motors, Generators and Variable Speed Systems; 12p (Northwestern)
8-13	Mechanical Variable Speed Drives; 8p; Cat. No. G-5812 (Reeves)
8-14	Electric Motors; 70p; Cat. No. 258 (Sterling)
8-15	Normal Speed Motors; 12p; (Sterling)
8-16	Speed Reduction; 12p (Sterling)
8-17	Variable Speed Drives; 8p (Sterling)
8-18	Synchronous Motors; 12p; Cat. No. SS459 (Superior Electric)
8-19	Variety Installation and Operating Instructions; 12p (U.S. Motors)

SECTION 9. LIGHTING EQUIPMENT AND LAMPS

See Section 5 for fixture hangers and supports, ballasts, and other lamp accessories; dimmers are listed in 3J.

9A. RESIDENTIAL LIGHTING FIXTURES

1. Ceiling downlights
2. Ceiling suspended units
3. Fluorescent
4. Vaporproof
5. Overall ceilings
6. Wall brackets
7. Bath mirror lights
8. Stair tread lights
10. Portable lamps (floor, table, desk, bed)

11. Entrance, porch, driveway, patio lights
12. Garden lights
13. Illuminated house numbers
14. Night lights

AOW Corp 450 N Ninth St Elwood Ind (10)
 Abrams Lighting 3432 Market St Philadelphia 4 Pa (3-7)
 Ace Lighting Products Co 230 Eugenia St S W Atlanta 3 Ga (1-2-3-6-7-11)
 Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif (3)
 Acme Lite Products Co Congers NY (10)
 Active Specialty Corp Elm St Walden NY (1-2-6-7-10-11)
 Adaliet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (4)
 Adjusta Post Mfg Co 908 St Clair St Akron 7 Ohio (11)
 Aerolux Lights Corp 653 11th Ave New York 36 NY (10)

Alco Lite Corp 1234 N Paulina St Chicago 22 Ill (10-11-12)
 Altko Mfg Co 4242 N Lincoln Ave Chicago 18 Ill (1-3)
 All-Brite Light Co 400 S 12 St Reading Pa (3)
 Amplex Corp 111 Water St Brooklyn 1 NY (1-6-10)
 Amplex Corp Glen Cove Rd Carle Place Long Island NY (1-6-10)
 Apollo Lighting Fixture Co Inc 262 W Third St Mt Vernon NY (3)
 Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (12)
 Arrow Lamps Inc 1270 Broadway New York 1 NY (10)
 Art Metal Co 1014 E 40 St Cleveland 3 Ohio (1-6-7-9-11)
 Art Specialty Co 3720 N Milwaukee Ave Chicago 43 Ill (6-10)
 Artcraft Lighting Co Inc 248 McKibben St Brooklyn 6 NY (2-6)

Artistic Lamp Mfg Co Inc 401 Fourth Ave NY 16 NY (2-10)
 Artolcor Corp 139 Main St Lodi New Jersey (1-2-6-11-12)
 Atlas Electric Products Co 319 Ten Eyck St Brooklyn 6 NY (1-9-11)
 B M D & R Inc 7020 Walker St St Louis Park Minneapolis 16 Minn (11)
 Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (11-12)
 Benjamin Electric Mfg Co Northwest Highway & Seegers Rd Des Plaines Ill (11-12)
 Black (M) Mfg Co 300-08 N Third St Phila 6 Pa (11-12)
 Blackhawk Industries 250 S Main St Dubuque Iowa (11)
 Calpa Products Co 5420 Paschali Ave Phila 43 Pa (10)
 Calumet Plastics Inc 10213 S LaSalle St Chicago 28 Ill (13)
 Calumet Plastics Inc 11201 S Cottage Grove Avenue Chicago 28 Illinois (13)
 Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif (12)
 Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash (5)
 Comet Lamp Co 7 E 35 St New York 16 NY (2)
 Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (1-2-3-6-9-11)
 Condi-Lite Corp 889 Broadway New York 3 NY (1)
 Curtis Development & Mfg Co 3244 N 33 St Milwaukee 16 Wis (13)
 Day-Brite Lighting Inc 6260 N Broadway St Louis 15 Mo (1)
 Durallite Lanterns Inc 163 Long Beach Rd Island Park NY (11)
 Duray Fluorescent Mfg Co 3318 W Montrose Ave Chicago 18 Ill (3)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (6-7-9-10-11)
 E J S Lighting Corp 321 E Pico Blvd Los Angeles 21 Calif (1-2-6-10)
 Eagle Mfg Co 3508 Avalon Blvd Los Angeles 11 Calif (1-6-10)
 Edmor Lamp Co Inc 1867 Flatbush Ave Brooklyn 10 NY (6-10)
 Elite Glass Co Inc 111 W 22nd St New York 11 NY (1-2-6)
 Emerson-Imperial Lighting Co Loyalhanna Park Latrobe Pa (1-2-6-7-11)
 Emerson-Pryne Co 140 N Towne Ave (P O Box 698) Pomona Calif (1-11)
 Esty Mfg Co 112 S Sagamore St Chicago 7 Ill (1-2-3-6-7-11)
 Everglow Lighting Fixture Co Inc 332 E Jericho Turnpike Huntington Station NY (3-11)
 Federal Lighting Corp 1425 Rockwell Ave Cleveland 14 Ohio (1-2-3-6-11-13)
 Flexo International Corp 3720 N Milwaukee Ave Chicago 41 Ill (10)
 Fluorescent Equipment & Mfg Co 5105 Cowan Ave Cleveland 27 Ohio (3-7)
 Fluorescent Fixtures of California 352 Shaw Rd South San Francisco Calif (3)
 Fostoria Pressed Steel Corp N Main St Fostoria Ohio (12)
 Frisbie (H C) Co 1120 E Pico Blvd Los Angeles 21 Calif (1-2-4-5-6-11)
 General Lighting Co 248 McKibbin St Brooklyn 6 NY (1-2-3-6-10-11)
 Geringer & Sons Mfg Corp Peekskill NY (1-2-3-6)
 Gleason Sales Co Inc 5809 W Montrose Ave Chicago 34 Ill (1)
 Globe Lighting Products Inc 1710 Flushing Ave Brooklyn 37 NY (1-2-3-6-10-11-12)
 Graybar Electric Co Inc 420 Lexington Ave NY 17 NY (2)
 Great Northern Mfg Corp 1056 N Wood St Chicago 22 Ill (3)
 Guth (Edwin F) Co 2615 Washington Blvd St Louis 3 Mo (1-3-5-6-11)
 Hadco Aluminum Products Co P O Box 128 Littleton Pa (11)
 Hasco Electric Corp 30 Grove Ave New Rochelle NY (5-12)
 Holophone Co Inc 342 Madison Ave New York 17 NY (11)
 House-O-Lite Corp 2430 S Ashland Ave Chicago 8 Ill (1-3-6-7-13)
 Independent Protection Co Inc 1605-07 S Main St Goshen Ind (11-12)
 Industrial Lamp Corp 14th & Blaine Sts Elkhart Ind (10)
 International Lighting Mfg Co 1825 N 19 St St Louis 6 Mo (1-2-3-6-7-11-12)
 Jackson Electrical Co 900 W Van Buren St Chicago 7 Ill (4-11-12)
 Jay Lighting Mfg Co Inc 23-29 Quincy St Brooklyn 38 NY (1-2-6-7)
 K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa (3)
 Kalsan Electric Co Inc 146 Mott St Oceanside L I NY (1-2-6-11)
 Kelly Specialty Co 5958-60 Washington Blvd Chicago 44 Ill (13)
 Kent Lighting Corp 500 Johnson Ave Brooklyn 37 NY (1-3-6)
 Keystone Electric Mfg Co 2228 E Tioga St Phila 34 Pa (3-6)
 Kichler (L D) Co 2101 Superior Ave Cleveland 14 Ohio (1-2-6-7)
 Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo (4-12)
 Kirlin Co 3435 E Jefferson Ave Detroit 7 Mich (1-9-11)

Kliag Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY (1)
 Klugite Mfg Co 316 Delancey St Phila 6 Pennsylvania (3)
 Koch & Lowy Mfg Co 201 E 34 St New York 16 NY (6-10)
 Leader Lamp Mfg Co 476 Broome St NY 13 NY (1-2-6-7-11)
 Lightcraft Inc 346 Claremont Ave Jersey City 5 NJ (1-2-3-6-7-10-11-12)
 Litecraft Mfg Co 100 Dayton Ave Passaic NJ (1-2-3-5-6-9-11)
 Lithonia Lighting Products Co Box 206 Conyers Ga (3)
 Luminous Ceilings Inc 3701 N Ravenswood Ave Chicago 13 Ill (5)
 Mason Flood Inc 50 Cray Ave Mt Vernon NY (11-12)
 Majestic Metal S & S Co Inc 537 Sackett St Brooklyn 17 NY (1-2-6)
 Markel Electric Products Inc 145 Seneca St Buffalo 3 NY (1-2-6-11-12)
 Marks Mfg Co 700 N Carpenter St Chicago 22 Ill (1-6-10)
 Markstone Mfg Co 1531 N Kingsbury Chicago 22 Ill (1-2-3-6-7-11)
 Marvel Lamp Co 307 Newark St Hoboken NJ (3)
 Marvin Electric Mfg Co 648 Santa Fe Ave Los Angeles 21 Calif (1-3-6-11)
 McPhibben Mfg Co Inc 1329 Willoughby Ave Brooklyn 37 NY (4-7-9-11)
 Mid-West Chandelier Co 15th & Gentry (P O Box 7365) North Kansas City 16 Mo (3)
 Miller Co Illuminating Div 99 Center St Meriden Conn (2)
 Microflexor Co Inc 40 Bayview Ave Inwood L I NY (1-2-6-7-10-11)
 Mitchell Lighting Div Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (1-3)
 Modern Swimming Pool Co Inc 1 Holland Ave White Plains NY (4)
 Moe Light Div Thomas Industries Inc 410 S 3rd St Louisville Ky (1-2-3-5-6-7-12)
 N L Corp 2480 E 22 St Cleveland 15 Ohio (1-11-13)
 Nemco Electric Co 210 Second Ave Seattle 4 Wash (1-2-4-6-7-11-12)
 Neo-Ray Products Inc 315 E 22 St NY 10 NY (3)
 Novelty Lighting Corp 2480 E 22 St Cleveland 15 Ohio (1-11-13)
 Osasco Mfg Co P O Box 7268 Ft Worth Tex (11)
 Pass & Seymour Inc Syracuse 9 New York (1-6-7-11)
 Perfectite Co 1457 E 40 St Cleveland 3 Ohio (9)
 Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville L I NY (10-11-12)
 Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (3-5)
 Prescolite Mfg Corp 2229 Fourth St Berkeley 10 Calif (1-2-6-7-9-10-11)
 ●PROGRESS MFG CO INC Castor Ave & Tulip St Phila 34 Pa (1-2-3-6-7-10-11-12)—ADV PG 163
 ●RODALE MFG CO INC 6th & Minor Sts Emmaus Pa (10)—ADV PG 153
 Project Fixture Mfg Corp 55 Ongley St Rockville Centre NY (1-2-5-6-7-10-11-12)
 Quaker City Electric Mfg Co 2810 E Pacific St Phila 34 Pa (3)
 Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (4-11-12)
 Reverse Electric Mfg Co 7420 N Lehigh Ave Chicago 48 Ill (12)
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY (12)
 Segl (L J) Co 2500 W North Ave Chicago 47 Ill (1-2-3-11)
 Shalida Mfg Co Inc 156 W Providencia Ave Burbank Calif (12)
 Southeast Lighting Inc 521 E 20 St Charlotte 1 NC (3)
 Spero Electric Corp 20500 St Clair Ave Cleveland 17 Ohio (4-11-12)
 Stabrite Fluorescent Mfg Co 3550 Northwest 49 St Miami Fla (1-3-10-11)
 Steber Mfg Co 2700 Roosevelt Rd Broadview Ill (11-12)
 Sternberg Mfg Co 4510 Addison St Chicago 41 Ill (11)
 Stocker & Yale Inc Green St Marblehead Mass (10)
 Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (4-11-12)
 Swivelier Co Inc Nanuet New York (1-2-3-6-7-10-12)
 Sylvania Electric Products Inc 1740 Broadway New York 19 NY (1-2)
 Tolen (William) & Son Inc 4041 Ridge Ave Philadelphia Pa (10)
 Tower Craftsmen Inc 105 Chestnut St Red Bank NJ (10)
 Union Insulating Co Inc Box 351 Parkersburg W Va (10-11-12)
 Versen (Kurt) Co 4 Slocum Ave Englewood NJ (1-2-6-10)
 Virden (John C) Co 5009-6103 Longfellow Ave Cleveland 3 Ohio (1-2-3-6-7-11-12)
 Weiss & Biheller Merchandise Corp 584 Broadway NY 12 NY (1-2-6)
 White (O C) Co 15-21 Hermon St Worcester 8 Mass (10)
 Wilson (J A) Lighting & Display Inc 1502 Industrial Dr Erie Pa (1)

9C. COMMERCIAL, INSTITUTIONAL & INDUSTRIAL LIGHTING EQUIPMENT

1. Incandescent fixtures
2. Fluorescent fixtures
3. Mercury & sodium vapor fixtures
4. Cold cathode fixtures
5. Arc lighting equipment
6. Neon lighting
7. Explosion-proof fixtures
8. Vaporproof fixtures
9. Dust-tight fixtures
10. Complete luminous ceiling systems
11. Warning lights
12. Pilot & indicating light assemblies
13. Showcase & display lighting
14. Emergency lighting units & systems
15. Stage lighting
16. Church lighting
17. Hospital lighting
18. Exit lights
19. Public building lighting
20. Battery-operated fluorescent fixtures
21. Lighted display signs

See also "Outdoor Lighting".

Abolite Lighting Div Jones Metal Products Co West Lafayette Ohio (1)
 Abrams Lighting 3432 Market St Philadelphia 4 Pa (2-13)
 Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif (2-13)
 Aclac Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (8)
 Adjustable Fixture Co 104 E Mason St Milwaukee 2 Wis (1)
 Ainsworth Lighting Inc 38-10 Twenty-Ninth St L I C 1 NY (1-2)
 Alkco Mfg Co 4242 N Lincoln Ave Chicago 18 Ill (1-2)
 All-Brite Light Co 400 S 12 St Reading Pa (2-13)
 Amplex Corp Glen Cove Rd Carle Place Long Island NY (1-13)
 Apollo Lighting Fixture Co Inc 162 W Third St Mt Vernon NY (1-2)
 Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1-2-3-7-8-9)
 Art Metal Co 1814 E 40 St Cleveland 3 Ohio (1-13)
 Artcraft Lighting Co Inc 248 McKibbin St Brooklyn 6 NY (1-2-13)
 Atlas Electric Products Co 319 Ten Eyck St Brooklyn 6 NY (1-2-11)
 B M D & R Inc 7020 Walker St St Louis Park Minneapolis 16 Minn (1-2-11)
 Baker-Barkon Co 1335 S W Morrison St Portland Ore (1)
 Benjamin Electric Mfg Co Northwest Highway & Seegers Rd Des Plaines Ill (1-2-3-7-8-9-11-13)
 Cable Electric Products Inc 234 Daboll St Providence 7 RI (14)
 ●CANNING-PEKARA INC 2144 N Wood St Chicago 14 Ill (2-13)—ADV PG 144
 Capitol Hardware Mfg Co Inc 400 N Leavitt St Chicago Ill (13)
 Capitol State Lighting Co Inc 527 W 45 St New York 36 NY (1-15)
 Carpenter Mfg Co 2250 Bradley St Somerville 45 Mass (11)
 Centralite Co Inc Dayton & Central Aves Cincinnati 14 Ohio (2)
 Century Lighting Inc 521 W 43 St New York 36 NY (1-13-15)
 Clean Sweep Co 6534½ Whittier Blvd Los Angeles 22 Calif (14)
 Cold Cathode Lighting Corp 42-40 27th St Long Island City NY (4-7-8-13)
 Cole (C W) & Co Inc P O Box 3382 Los Angeles 54 Calif (1-2-13-15)
 Colonial Electric Products Div Colonial Neon Co Inc 1-115 Market St East Paterson NJ (2)
 Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash (2-9-10-13)
 Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (1-2-13)
 Condi-Lite Corp 889 Broadway New York 3 NY (1-2)
 Cooper Hewitt Electric Co 720-732 Grand St Hoboken NJ (2-3)
 Crouse-Hinds Co Syracuse 1 NY (1-2-3-7-8-9-11-13)
 Crownlite Fluorescent Co 7 Roselle St Mineola NY (2-4-10-13)
 Curtis Lighting Div Curtis-AllBrite Lighting Inc 6135 W 65 St Chicago 38 Ill (1-2-3)
 Cutler Light Mfg Co 2026 N 22 St Phila 21 Pa (4-13)
 Day-Brite Lighting Inc 6260 N Broadway St Louis 15 Mo (1-2-8-11)
 Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (7-8-9)
 Diallight Corp 60 Stewart Avenue Brooklyn 37 NY (18)
 Drake Mfg Co 4626 N Dicot Harwood Heights Chicago 31 Ill (12)
 Dual-Lite Co Inc Newtown Conn (14-18)
 Duray Fluorescent Mfg Co 3318 W Montrose Ave Chicago 18 Ill (2)
 Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (1-2-11-13)
 Dynaseal Lighting Corp 5 Hadley St Cambridge 40 Mass (14)
 E J S Lighting Corp 321 E Pico Blvd Los Angeles 21 Calif (1)

- Electric Cord Co 21 Spruce St New York 38 NY (11-14)
- Electric Lighting Inc P O Box 1907 Stockton Calif (2-13)
- Electric Re-Light Co 625 S Goodman St Rochester 20 NY (2)
- ELECTRO LIGHTING CORP 1535 Paulina St Chicago 8 III (1-2-3-10)—ADV PG 154
- Electro-Snap Switch & Mfg Co 4218-30 W Lake St Chicago 24 III (12)
- Electrosnap Corp Switch Div 4218-30 W Lake St Chicago 24 III (12)
- Emerson-Pryne Co 140 N Towne Ave (P O Box 698) Pomona Calif (1-13)
- Ender-Monarch Corp 141 Lanza Ave Garfield NJ (1-2-4-10)
- Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio (8)
- Everglow Lighting Fixture Co Inc 332 E Jericho Turnpike Huntington Station NY (1-2)
- Fannon (John J) Co 3000 E Woodbridge Detroit 7 Mich (10)
- Federal Lighting Corp 1425 Rockwell Ave Cleveland 14 Ohio (1-2)
- Federal Sign & Signal Corp 13626 S Western Ave Blue Island III (11)
- Felco Products Inc 8700 Ambassador Row Dallas 19 Tex (2)
- Flexo International Corp 3720 N Milwaukee Ave Chicago 41 III (1-2)
- Fluores-O-Lite Co Evans Terminal North Broad St Hillside 5 NJ (1-2-13)
- Fluorescent Equipment & Mfg Co 5105 Cowan Ave Cleveland 27 Ohio (1-2-13)
- Fluorescent Fixtures of California 352 Shaw Rd South San Francisco Calif (2)
- Frink Corp 211 63rd St Brooklyn 20 NY (1-2-18)
- Frisbie (H C) Co 1120 E Pico Blvd Los Angeles 21 Calif (1)
- Fulleton Mfg Co Willard Rd Norwalk Conn (1-2-10)
- Garco Lighting Div Garden City Plating & Mfg Co 2475 Elston Ave Chicago 47 III (1-2-13)
- Gedney Electric Co Americas Bldg Radio City NY 20 NY (8)
- General Lighting Co 248 McKibbin St Brooklyn 6 NY (1-2-13)
- Gibson Mfg Co 1919 Piedmont Circle N E Atlanta Ga (2)
- Gleason Sales Co Inc 5809 W Montrose Ave Chicago 34 III (1)
- Globe Lighting Products Inc 1710 Flushing Ave Brooklyn 37 NY (1-2-13)
- GOOD MFG CO INC 1015 N Halsted St Chicago 22 III (2)—ADV PG 156
- Graybar Electric Co Inc 420 Lexington Ave NY 17 NY (1-2)
- Great Northern Mfg Corp 1056 N Wood St Chicago 22 III (2-13)
- Gruber Bros Inc 125 South First St Brooklyn 11 NY (1-2-9-13)
- GUTH (EDWIN F) Co 2615 Washington Blvd St Louis 3 Mo (1-2-3-9-13-15)—ADV PG 107
- Nasco Electric Corp 30 Grove Ave New Rochelle NY (1-2-13)
- Holophone Co Inc 342 Madison Ave New York 17 NY (1-2-3-8-9-10)
- House-O-Lite Corp 2430 S Ashland Ave Chicago 8 III (2-13-14)
- Hub Electric Co 2255 W Grand Ave Chicago 12 III (1-2-11-15)
- Ideal-Simplet Fittings Inc 5136 Park Ave Sycamore III (8)
- Illuminating Engineering Co 2347 East Nine Mile Rd Hazel Park Mich (4)
- Industrial Devices Inc Edgewater 19 New Jersey (12)
- Integrated Ceilings Inc 11766 W Pico Blvd Los Angeles 64 Calif (10)
- International Lighting Mfg Co 1825 N 19 St St Louis 6 Mo (1-2)
- JACKSON ELECTRICAL CO 900 W Van Buren St Chicago 7 III (1-8-9)—ADV PG 158
- Jay Lighting Mfg Co Inc 23-29 Quincy St Brooklyn 38 New York (1)
- Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (9)
- K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa (2)
- Kalsan Electric Co Inc 146 Mott St Oceanside LI NY (1-2-11-13)
- Kayline Co 2480 E 22 St Cleveland 15 Ohio (1-2)
- Kelly Specialty Co 5958-60 Washington Blvd Chicago 44 III (11)
- Kembert-Appag Co 520 Barretto St Bronx 59 NY (2)
- Kent Lighting Corp 500 Johnson Ave Brooklyn 37 NY (1-2-10-13)
- Keystone Electric Mfg Co 2228 E Toga St Phila 34 Pa (2-13)
- KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (1-3-7-8-9-12-13)—ADV PG 119
- Kirkland (H R) Co 8 King St Morristown NJ (11)
- Kirlin Co 3435 E Jefferson Ave Detroit 7 Mich (1-2-13)
- Klieg Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY (1-2-14-15)
- Kliglitt Mfg Co 316 Delancey St Phila 6 Pa (2-13)
- Koch & Lowy Mfg Co 201 E 34 St New York 16 NY (1)
- Kord (Leonard E) Co P O Box 55424 Indianapolis 5 Ind (1-2)
- Kurtzon (Morris) Inc 1420 S Talman Ave Chicago 8 III (1-2-11-13)
- Larco Inc Route 20 East Painesville Ohio (9-11)
- Light & Power Utilities Corp 1035 Firestone Blvd Memphis 7 Tenn (2-13)
- Lightalams Inc 95 Atlantic Ave Brooklyn 1 NY (14)
- Lighting Dynamics Inc 802 W Whittier Blvd Whittier Calif (1-2-13)
- Lighting Products Inc 1549 Park Ave West Highland Park III (2)
- Lightmore Appliance Corp 651-5 Driggs Ave Brooklyn 11 NY (21)
- Lightoller Inc 346 Claremont Ave Jersey City 5 NJ (1-2)
- Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-2)
- Litecontrol Corp 36 Pleasant St Watertown 72 Mass (1-2-13)
- Litecraft Mfg Corp 100 Dayton Ave Passaic NJ (1-2-8-9-10-13)
- Lithonia Lighting Products Co Box 206 Conyers Ga (2-13)
- Luminous Ceilings Inc 3701 N Ravenswood Ave Chicago 13 III (2-10-13)
- Luxor Lighting Products Inc 350 5th Ave New York 1 NY (1-2)
- Maani Flood Inc 50 Cray Ave Mt Vernon NY (13)
- Major Equipment Co Inc 4603 W Fullerton Ave Chicago 39 III (15)
- Manning (R A) Co Inc 1810 North Ave Sheboygan Wisc (16-19)
- Marco Industries 207 E Helena St Anaheim Calif (11-12)
- Markstone Mfg Co 1531 N Kingsbury Chicago 22 III (1-2)
- Marlow Lights Inc Fanwood NJ (2)
- Marvel Lamp Co 307 Newark St Hoboken NJ (2-13)
- Masterlite Mfg Co 2758 Kensington Ave Phila Pa (2)
- McPhallen Mfg Co Inc 1329 Willoughby Ave Brooklyn 37 NY (1-2-3-8-9)
- Meier-Johan-Wengler 1102 W 9th St Cincinnati 3 Ohio (1)
- Metacraft Products Co Inc Mascher & Lippincott Sts Phila 33 Pa (2-13)
- Mid-West Chandelier Co 15th & Gentry (P O Box 7365) North Kansas City 16 Mo (2-13)
- Midwest Lighting Products Co P O Box 536 Edgewater Branch Cleveland 7 Ohio (1)
- Miller Co Illuminating Div 99 Center St Meriden Conn (1-2-3-8-9)
- MiroFlector Co Inc 40 Bayview Ave Inwood LI NY (1-13-15)
- Mitchell Lighting Div Compco Corp 1800 N Spaulding Ave Chicago 47 III (1-2-13)
- Modern Light Co Inc 7809 Maplewood Industrial Court St Louis 17 Mo (2)
- Moe Light Div Thomas Industries Inc 410 S 3rd St Louisville Ky (1-2-13)
- Moldcast Mfg Co 236 South St Newark 5 NJ (1-3)
- Mole-Richardson Co 937 N Sycamore Ave Hollywood 38 Calif (5)
- MULTI ELECTRIC MFG INC 4223 W Lake St Chicago 24 III (1-2-3-8-9)—ADV PG 147
- N L Corp 2480 E 22 St Cleveland 15 Ohio (1-13)
- Natale Machine & Tool Co 339 Highway #17 Carlstadt NJ (1)
- National Cathode Corp 317 E 34 St New York 16 NY (4-10)
- Nemco Electric Co 210 Second Ave Seattle 4 Wash (1-2-11-13)
- Neo-Ray Products Inc 315 E 22 St NY 10 NY (1-2-10-13-15)
- Nepo Mfg Co 4230 N Sayre Chicago 34 III (13)
- Nicad Div Gould-National Batteries Inc Easthampton Mass (14)
- Noel Mfg Co 3 W 18 St New York 11 NY (1)
- Northern Incandescent Lamp Co 1 Newark St Hoboken NJ (1)
- Northern Light Co 1661 N Water St Milwaukee 2 Wis (2-10-13)
- Overbagh & Ayres Mfg Co 411 S Clinton St Chicago 7 III (1-8)
- Palco Mfg Co 1260 Pennsylvania Ave San Francisco 7 Calif (17)
- Paramount Industries Inc G-1080 Ballinger Rd Flint 4 Mich (2)
- Penetrav Corp 615 Front St Toledo 5 Ohio (1-13-15)
- Penn (Wm) Fluorescent Light Mfg Co 1228 N 31 St Philadelphia 21 Pa (2-13)
- PERFECTITE CO 1457 E 40 St Cleveland 3 Ohio (1-8)—ADV PG 139
- Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville NY (8-9-13)
- Phillips (Oscar) Co 9701 Reading Rd (Box 21) Cincinnati 15 Ohio (2-13)
- Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (1-2-10-13)
- Portable Light Co Inc 2216 William St NY 38 NY (11-14)
- Prescolite Mfg Corp 2229 Fourth St Berkeley LI Calif (1-13)
- Price Bros Inc 4301 W Madison Chicago III (11)
- Project Fixture Mfg Corp 55 Ongley St Rockville Centre NY (1-11)
- Pyle-National Co 1344 N Kostner Ave Chicago 51 III (7-8-9-11-12)
- Quadrangle Mfg Co 32 S Peoria St Chicago 7 III (1-3-8-9-13)
- Quaker City Electric Mfg Co 2810 E Pacific St Phila 34 Pa (2-13)
- Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (7-8)
- Rambusch Decorating Co 40 W 13 St New York 11 NY (1-2)
- Revere Electric Mfg Co 7420 N Lehigh Ave Chicago 48 III (1-2)
- Ruby-Phillite Corp 32-02 Queens Blvd LIC 1 NY (1-2)
- Russell & Stoll Co Inc 125 Barclay St NY 7 NY (7-8-9)
- Scranton Storage Battery Corp Archbald Pa (14)
- Segli (L J) Co 2500 W North Ave Chicago 47 III (2-13)
- Sentry-Lite & Battery Div Hobby & Brown Electronic Corp 237 Sunrise Highway Rockville Centre NY (14)
- Shalda Mfg Co Inc 156 W Providencia Ave Burbank Calif (1-3-8-9-11-13-14)
- Silway Lighting Inc 100 W Main St Bound Brook NJ (1-2-13)
- Simes Co Inc 114 15th Ave College Point LI NY (1-2-3-8-9-11-17)
- Sireno Co Inc 214 William St New York 38 NY (11)
- Smithcraft Lighting 217 Everett Ave Chelsea 50 Mass (2-10)
- Smoot-Holman Co 321 N Eucalyptus Ave (P O Box 4097) Inglewood Calif (1-2-3-8-9)
- Solar Light Mfg Co 400 N Ashland Chicago 22 III (1-2-13)
- Solux Corp 58-17 28th Ave Woodside 77 LI NY (1-2-7-8-11-13)
- Southeast Lighting Inc 521 E 20 St Charlotte 1 NC (2)
- Spero Electric Corp 20500 St Clair Ave Cleveland 17 Ohio (1-3-6-12)
- Stabrite Fluorescent Mfg Co 3550 Northwest 49 St Miami Fla (1-2-13)
- Stamford Metal Specialty Co Inc 429 W Broadway New York 12 NY (1-2)
- Standard Electric Time Co 89 Logan St Springfield 2 Mass (14)
- Standard Portable Cord Co Inc Mayville NY (14)
- Steber Mfg Co 2700 Roosevelt Rd Broadview III (1-8-13)
- Sternberg Mfg Co 4510 Addison St Chicago 41 III (1-16)
- Stocker & Yale Inc Green St Marblehead Mass (2-9-13)
- Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (1-3-8-14-15)
- Sun-lite Mfg Co 2555 Bellevue Ave Detroit 7 Mich (1-2-13)
- Sunbeam Lighting Co 777 E 14 Pl Los Angeles 21 Calif (1-2-13-17)
- Superior Electric Co 83 Laurel St Bristol Conn (15)
- Sub-Equipment Corp 135 S LaSalle St Chicago 3 III (12)
- Swedish Iron & Steel Corp 910 Westfield Ave Elizabeth NJ (2)
- Swiveller Co Inc Nanuet NY (1-2-13)
- Sylvania Electric Products Inc 1740 Broadway NY 19 NY (1-2-12)
- Tedcar Products Co Box 1209 Union NJ (11)
- Tod Lite Inc 3401 N W 10th St Oklahoma City Okla (14)
- Transolite Corp 550 Fifth Ave New York 36 NY (2-10)
- Tri-Park Mfg Co 925 Cherry St Detroit 1 Mich (2-8-13)
- Triopie Mfg Co 133 N Jefferson St Chicago 6 III (11)
- U-C-Lite Mfg Co 1050 W Hubbard St Chicago 22 III (11)
- Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif (13)
- Union Insulating Co Inc Box 351 Parkersburg W Va (8-9)
- United States Radium Corp Hanover Ave Morristown NJ (11-12-14)
- V V Fitting Co 711 Cherry St Phila 6 Pa (9)
- Versen (Kurt) Co 4 Slocum Ave Englewood NJ (1-13)
- Virden (John C) Co 5009-6103 Longfellow Ave Cleveland 3 Ohio (2)
- Voigt Co 1636 N Carlisle St Phila 21 Pa (16)
- Wakefield Co 731 S Water St Vermilion Ohio (1-2-10)
- Webb Electric Mfg Co 1701 S W Jefferson St Portland 1 Ore (1)
- Weiss and Biheller Merchandise Corp 584 Broadway NY 12 NY (1)
- Westinghouse Electric Corp Lighting Div 1216 W 58th St (P O Drawer 5817) Cleveland 1 Ohio (1-2-3-8-9-13)
- WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3-8-9)—ADV PG 2nd Cover
- Wheeler Reflector Co 275 Congress St Boston 10 Mass (1-2-3-8-9-13)
- White (O C) Co 15-21 Hermon St Worcester 8 Mass (1-2)
- Wiley (R & W) Inc Dearborn & Bridge St Buffalo 7 NY (2)
- Williams (H E) Products Co 106 S Main St Carthage Mo (2-13)
- Wilmet Castle Co 1928 E Henrietta Rd Rochester NY (17)
- Wilson (J A) Lighting & Display Inc 1502 Industrial Dr Erie Pa (1-10)
- Wiremold Co Hartford 10 Conn (13)
- Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 III (8)
- Woodward Machine Co Lighting Div 4833 Elmhurst Detroit 4 Mich (8-9)
- Work-Lite Co 522 Cortlandt St Belleville 9 NJ (2-13)

9D. OUTDOOR LIGHTING EQUIPMENT

1. Airport lighting
2. Floodlights
3. Beacons & Searchlights
4. Spotlights
5. Street & highway lighting
6. Lighting towers & standards
7. Sign lighting
8. Obstruction lighting
9. Traffic signals & controls
10. Service station lighting
11. Marine lighting
12. Underwater lighting
13. Parking and area lighting

Equipment manufactured for specialized commercial and residential applications. Residential outdoor lighting is included in Residential Lighting.

- Abolite Lighting Div Jones Metal Products Co West Lafayette Ohio (2)
- Abrams Lighting 3432 Market St Philadelphia 4 Pa (4)
- Afco Lite Corp 1234 N Paulina St Chicago 22 Ill (2)
- Alexander-Tagg Industries Inc Jacksonville Road at Summit Ave Hatboro Pa (4)
- American Concrete Corp 5092 N Kimberly Ave Chicago 30 Ill (6)
- Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (2)
- Art Metal Co 1814 E 40 St Cleveland 3 Ohio (2-4)
- Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (2-4)
- Benjamin Electric Mfg Co Northwest Highway & Seegers Rd Des Plaines Ill (2-5)
- Canning-Pekara Inc 2144 N Wood St Chicago 14 Ill (2)
- Carpenter Mfg Co 2250 Bradley St Somerville 45 Mass (8)
- Cold Cathode Lighting Corp 42-40 27th St Long Island City NY (5)
- Cole (C W) & Co Inc P O Box 3382 Los Angeles 54 Calif (4)
- Colonial Electric Products Div Colonial Neon Co Inc 1-115 Market St East Paterson NJ (5-6-13)
- Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash (2-7-10)
- Compo Corp 1800 N Spaulding Ave Chicago 47 Ill (2-5)
- Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (5)
- Crouse-Hinds Co Syracuse 1 NY (1 thru 5)
- Cutler Electrical Products Inc 5324 Haverford Ave Philadelphia Pa (7)
- Derrick Light & Equipment Co 1201 E Daggett (P O Box 434) Fort Worth Tex (2)
- Duro-Test Corp 2321 Madison Blvd North Bergen NJ (2)
- Electric Lighting Inc P O Box 1907 Stockton Calif (5-10)
- Electro Lighting Corp 1535 Paulina St Chicago 8 Ill (2-4)
- Eleco Corp 2900-18 Cormany Ave Cincinnati 25 Ohio (6)
- FEDERAL SIGN & SIGNAL CORP 13636 S Western Ave Blue Island Ill (3)—ADV PG 156
- General Electric Co Apparatus Sales Div Schenectady 5 NY (2-3-5)
- Globe Lighting Products Inc 1710 Flushing Ave Brooklyn 37 NY (4)
- Graybar Electric Inc 420 Lexington Ave NY 17 NY (1-3-5)
- Great Northern Mfg Corp 1065 N Wood St Chicago 22 Ill (2-5)
- Guardian Light Co 500 N Blvd Oak Park Ill (5)
- Guth (Edwin F) Co 2615 Washington Blvd St Louis 3 Mo (2)
- Holophane Co Inc 342 Madison Ave New York 17 NY (2-5)
- House-O-Lite Corp 2430 S Ashland Ave Chicago 8 Ill (2-4)
- Hub Electric Co 2255 W Grand Ave Chicago 12 Ill (4)
- Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (1-2-5)
- Hughes & Phillips Inc 3200 North San Fernando Blvd Burbank Calif (1-8-9)
- JACKSON ELECTRICAL CO 900 W Van Buren St Chicago 7 Ill (2-4)—ADV PG 158
- Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (5)
- Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (2-4)
- Joy Mfg Co H W Oliver Bldg Pittsburgh 22 Pa (2)
- K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa (2)
- Kalsan Electric Co Inc 146 Matt St Oceanside LI NY (4)
- Kayline Co 2480 E 22 St Cleveland 15 Ohio (4)
- Kenworth Co Winsted 1 Minn (2)
- Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo (2-4-5)
- Kiegl Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY (2-4)
- Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-2-3-5)
- Magni Flood Inc 50 Cray Ave Mt Vernon NY (2)
- Manning (RA) Co Inc 1810 North Ave Sheboygan Wis (2)
- Marbelite Co Inc 179 N 10 St Brooklyn 11 NY (8)
- McPhilen Mfg Co Inc 1329 Willoughby Ave Brooklyn 37 NY (5)
- Meier-John-Wengler 1102 W 9th St Cincinnati 3 Ohio (5)
- MEYER MACHINE INC Red Wing Minn (6)—ADV PG 163
- Midwest Lighting Products Co P O Box 536 Edgewater Branch Cleveland 7 Ohio (2)
- Millerbernd Mfg Co Winsted Minn (5-6)
- Microflexor Co Inc 40 Bayview Ave Inwood LI NY (2-4)
- Mitchell Lighting Div Compo Corp 1800 N Spaulding Ave Chicago 47 Ill (2)
- Moldcast Mfg Co 236 South St Newark 5 NJ (2-13)
- MULTI ELECTRIC MFG INC 4223 W Lake St Chicago 24 Ill (1-2-4)—ADV PG 147
- Natale Machine & Tool Co 339 Highway #17 Carlstadt NJ (2-4)
- Nepo Mfg Co 4230 N Sayre Chicago 34 Ill (2-5)
- Overbagh & Ayres Mfg Co 411 S Clinton St Chicago 7 Ill (2)
- Penetray Corp 615 Front St Toledo 5 Ohio (2)
- Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville LI NY (2-4)
- Pfaff & Kendall 84 Foundry St Newark 5 NJ (5)
- Philadelphia Electrical & Mfg Co 1200-36 N 31 St Phila 21 Pa (2-5)
- Phillips (Oscar) Co 9701 Reading Rd (Box 21) Cincinnati 15 Ohio (2-10)
- Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (2-4)
- Proct Fixture Mfg Corp 55 Ongley St Rockville Centre NY (4)
- Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (2)
- Quadrangle Mfg Co 32 S Peoria St Chicago 7 Ill (2)
- Rab Electric Mfg Co Inc 605 E 132 St New York 34 NY (2-4)
- Reverse Electric Mfg Co 7420 N Lehigh Ave Chicago 48 Ill (1-2-4-5)
- Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (2-4)
- Rostan Corp 5660 59th St Maspeth 78 LI NY (6)
- Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (5)
- Ryther Purdy Lumber Co Inc 501 Tiffany St New York 59 NY (6)
- Shalda Mfg Co Inc 156 W Providencia Ave Burbank Calif (2-4)
- Simes Co Inc 114 15th Ave College Point LI NY (5-6-9-11)
- Sireno Co Inc 214 William St New York 38 NY (3-4)
- Smoot-Holman Co 321 N Eucalyptus Ave (P O Box 4097) Inglewood Calif (2)
- Solar Light Mfg Co 400 North Ashland Chicago 22 Ill (2)
- Spero Electric Corp 20500 St Clair Ave Cleveland 17 Ohio (2-4)
- Stabrite Fluorescent Mfg Co 3550 Northwest 49 St Miami Fla (2)
- Steber Mfg Co 2700 Roosevelt Rd Broadview Ill (2-4)
- Sterner Industries Winsted 1 Minn (2)
- Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (2-4)
- Sunbeam Lighting Co 777 E 14th Pl Los Angeles 21 Calif (5)
- Swiveller Co Inc Nanuet NY (2-4)
- Thompson Electric Co P O Box 873 Cleveland 22 Ohio (5)
- Too-Lite Inc 3401 NW 10 St Oklahoma City Okla (4)
- UNION METAL MFG CO 1432 Maple Ave Canton 5 Ohio (5)—ADV PG 126
- Utilities Service Co 1 Pine St Allentown Pa (5)
- Wallace & Tierman Inc 25 Main St Belleville NJ (11)
- Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (5-6)
- Westinghouse Electric Corp Lighting Div 1216 W 58th St (PO Drawer 5817) Cleveland 1 Ohio (1-2-5)
- WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3-4-5)—ADV PG 2nd COVER
- Wheeler Reflector Co 275 Congress St Boston 10 Mass (2-5)
- Wiley (R&W) Inc Dearborn & Bridge St Buffalo 7 NY (4)
- Woodward Machine Co Lighting Div 4833 Elmhurst Detroit 4 Mich (2)
- Work-O-Lite Co 522 Cortlandt St Belleville 9 NJ (2)

9E. PORTABLE LIGHTING EQUIPMENT

1. Machine & bench lights
2. Extension cord & lamp
3. Extension cord & lamp with transformer
4. Reel-type extension lamp
5. Emergency lights
6. Inspection lights

For portable lamps for residential use see "Residential Lighting."

- Adjustable Fixture Co 104 E Mason St Milwaukee 2 Wis (1)
- Arco Mfg Co 1701 13th Ave North (Box 817) Grand Forks ND (1)
- Benjamin Electric Mfg Co Northwest Highway & Seegers Rd Des Plaines Ill (1-2)

- Benjamin Reel Products Inc 10700 Broadway Cleveland 25 Ohio (4)
- Burton Mfg Co 2520 Colorado Ave Santa Monica Calif (1)
- Carpenter Mfg Co 2250 Bradley St Somerville 45 Mass (5)
- Commercial Reflector & Mfg Co 3109 Maple Ave Los Angeles 11 Calif (6)
- Compo Corp 1800 N Spaulding Ave Chicago 47 Ill (2)
- Cordomatic Div Vacuum Cleaner Corp of America 1724 W Indiana Ave Phila 32 Pa (4)
- Crouse-Hinds Co Syracuse 1 NY (1-2)
- Day-Ray Products Inc 1133 Mission St South Pasadena Calif (2-3)
- Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio (2-3-4)
- Flezo International Corp 3720 N Milwaukee Ave Chicago 41 Ill (1)
- Fostoria Pressed Steel Corp N Main St Fostoria Ohio (1)
- Gardner Products Co 15244 Aubrey Detroit 39 Mich (1-2)
- Industrial Electrical Works Inc 1509 Chicago St Omaha 2 Neb (4)
- Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (2-3)
- Joy Mfg Co H W Oliver Bldg Pittsburgh 22 Pa (2-3)
- Koch & Lowy Mfg Co 201 E 34 St New York 16 NY (4)
- Koehler Mfg Co 395 Lincoln St Marlboro Mass (5)
- McGill Mfg Co Inc Valparaiso Ind (2)
- Michigan Fluorescent Light Div 393 Orchard Lake Ave Pontiac Mich (1)
- Midwest Lighting Products Co P O Box 536 Edgewater Branch Cleveland 7 Ohio (1)
- Murray (D A) Co Inc 632 N Mill St Tipton Ind (2)
- Natale Machine & Tool Co 339 Highway #17 Carlstadt NJ (2)
- Project Fixture Mfg Corp 55 Ongley St Rockville Centre NY (2)
- Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (2)
- ROYAL ELECTRIC CORP 95 Grand Ave Pawtucket RI (2)—ADV PG 122
- Sireno Co Inc 214 William St New York 38 NY (5)
- Standard Portable Cord Co Inc Mayville NY (1-2)
- Stocker & Yale Inc Green St Marblehead Mass (1-2-3)
- Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (2)
- Sun-Lite Mfg Co 2555 Bellevue Ave Detroit 7 Mich (1)
- Swiveller Co Inc Nanuet NY (1-2)
- U-C-LITE MFG CO 1050 W Hubbard St Chicago 22 Ill (5)—ADV PG 164
- Vimco Mfg Co Inc 105 Brayton St Buffalo 13 NY (1)
- Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (1)
- WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1 thru 5)—ADV PG 2nd COVER
- White (O C) Co 15-21 Hermon St Worcester 8 Mass (1)
- Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 Ill (2-3-4)
- Woodward Machine Co Lighting Div 4833 Elmhurst Detroit 4 Mich (1)

9F. GASEOUS DISCHARGE LAMPS

1. Arc
2. Cold cathode
3. Fluorescent
4. Mercury vapor
5. Sodium vapor

Light sources only; fixtures are listed under "Portable Lamps" and "Residential Lighting."

- Amplex Corp Glen Cove Rd Carle Place Long Island NY (3-4)
- Champion Lamp Works 330 Lynnway Lynn Mass (3)
- Cold Cathode Lighting Corp 42-40 27th St Long Island City NY (2)
- Cooper Hewitt Electric Co 720-732 Grand St Hoboken NJ (3-4)
- Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (2-3-4)
- General Electric Co Lamp Div Large Lamp Dept Nela Park Cleveland Ohio (3-4)
- GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (3)—ADV PG 4-15
- Grest Western Div Interlectric Corp 1401 Lexington Ave Warren Pa (3)
- Illuminating Engineering Co 2347 East Nine Mile Rd Hazel Park Mich (2)
- Luxor Lighting Products Inc 350 5th Ave New York 1 NY (2-3-4)
- Marvel Lamp Co 307 Newark St Hoboken NJ (3)
- National Cathode Corp 317 E 34 St New York 16 NY (2)
- Penetray Corp 615 Front St Toledo 5 Ohio (3-4)
- Pollak Luminescent Corp 732 S Federal St Chicago 5 Ill (2)
- Radiant Lamp Corp 300 Jelliff Ave Newark 8 NJ (4)

Solar Electric Corp 121 Central Ave Warren Pa (3)
 Sicular Laboratories Inc 1197 McCarter Highway Newark NJ (3)
 Supro Lux Mfg Co Inc 406-416 E 161 St New York 51 NY (2-3)
 Swedish Iron & Steel Corp 910 Westfield Ave Elizabeth NJ (2)
 Sylvania Electric Products Inc 1740 Broadway NY 19 NY (1-3)
 Westinghouse Electric Corp Lamp Div Bloomfield NJ (1-2-3-4-5)
 ●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1 thru 5) ADV PG 2nd COVER

9G. FILAMENT LAMPS

1. Clear or frosted
2. Colored
3. Glow (neon & argon)
4. Infared
5. Ultra-violet
6. Insect repellent
7. Miniature
8. Reflector flood & PAR
9. Sealed beam
10. Decorative
11. Quartz

Light sources only; fixtures are listed under "Portable Lamps" and "Residential Lighting."

Aerolux Lights Corp 653 11th Ave New York 36 NY (2-3-5-10)
 Amplex Corp 111 Water St Brooklyn 1 NY (1-2-4-6-8-9)
 Amplex Corp Glen Cove Rd Carle Place Long Island NY (2-4-6-8-9)
 Champion Lamp Works 330 Lynnway Lynn Mass (1-2-4-6-8-10)
 Chicago Miniature Lamp Works 1500 N Ogden Ave Chicago 10 III (1-2-3-7-9)
 Cold Cathode Lighting Corp 42-40 27th St Long Island City NY (5)
 Dialight Corp 60 Stewart Ave Brooklyn 37 NY (3-7)
 Dralex Mfg Co 4626 N Olcott Harwood Heights Chicago 31 III (3-7)
 Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (1-2-4-6-8)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (4)
 Elite Glass Co Inc 111 W 22nd St New York 11 NY (1)
 General Electric Co Lamp Div Large Lamp Dept Nela Park Cleveland Ohio (1 thru 10)
 General Electric Co Lamp Div Miniature Lamp Dept Nela Park Cleveland Ohio (7)
 ●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-2)—ADV PG 4
 Hudson Lamp Co 528 Elm St Kearny NJ (3-7)
 Luxor Lighting Products Inc 350 5th Ave New York 1 NY (1-2-4-6-8-9)
 Marcon Industries 207 S Helena St Anaheim Calif (3-7)
 Marvel Lamp Co 307 Newark St Hoboken NJ (1-4-6-8)
 Natale Machine & Tool Co 339 Highway #17 Carlstadt NJ (8)
 ●NORTH AMERICAN ELECTRIC LAMP CO 1520 North 13th St St Louis 6 Mo (2-4-7-10)—ADV PG 160
 Northern Incandescent Lamp Co 1 Newark St Hoboken NJ (1-2-4-6)
 Penetray Corp 615 Front St Toledo 5 Ohio (1-2-4-5-6-8)
 Pyroall Inc 1889 Front St Cuyahoga Falls Ohio (4)
 Radiant Lamp Corp 300 Jelliff Ave Newark 8 NJ (1-2-4-8-9)
 Signalite Inc 37-41 Neptune Highway Neptune NJ (3)
 Solar Electric Corp 121 Central Ave Warren Pa (1-2-4-6)
 Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (1-6-8)
 Sylvania Electric Products Inc 1740 Broadway NY 19 NY (1-2-3-4-7-8)
 Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif (5)
 Westinghouse Electric Corp Lamp Div Bloomfield NJ (1 thru 9)
 Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)

9H. LIGHTING SYSTEM ACCESSORIES

1. Reflectors
2. Louvers
3. Glassware
4. Panels
5. T-bars & supports

For use with suitable sockets or fixtures or for area and ceiling lighting systems.

Abolite Lighting Div Jones Metal Products Co West Lafayette Ohio (1-2)
 Abrams Lighting 3432 Market St Philadelphia 4 Pa (1)
 Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif (1)
 Adalet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (1)
 Afco Lite Corp 1234 N Paulina St Chicago 22 III (1)
 All-Brite Light Co 400 S 12 St Reading Pa (1)
 ●AMERICAN LOUVER CO 4240 N Sayre Ave Chicago 34 III (2)—ADV PG 121
 Artcraft Lighting Co Inc 248 McKibbin St Brooklyn 6 NY (1)
 B M D & R Inc 7020 Walker St St Louis Park, Minneapolis 16 Minn (1)
 Benjamin Electric Mfg Co Northwest Highway & Seegers Rd Des Plaines III (1)
 Canning-Pekara Inc 2144 N Wood St Chicago 14 III (1-2)
 Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (1)
 Cold Cathode Lighting Corp 42-40 27th St Long Island City NY (1)
 Cole (C W) & Co Inc P O Box 3382 Los Angeles 54 Calif (1)
 Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash (2)
 Compco Corp 1800 N Spaulding Ave Chicago 47 III (1)
 Corning Glass Works Corning NY (3-4)
 Crownlite Fluorescent Co 7 Roselle St Mineola NY (1)
 Curtis Lighting Div Curtis-All Brite Lighting Inc 6135 W 65 St Chicago 38 III (1)
 Cutler Light Mfg Co 2026 N 22 St Phila 21 Pa (1)
 Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth TX (1)
 Electro Lighting Corp 1535 Paulina St Chicago 8 III (1)
 Erie Glass Mfg Co 564 Union Trust Bldg Pittsburgh 19 Pa (3)
 Frink Corp 211 63rd St Brooklyn 20 NY (1-2)
 General Lighting Co 248 McKibbin St Brooklyn 6 NY (1)
 Great Northern Mfg Corp 1056 N Wood St Chicago 22 III (1)
 Gruber Bros Inc 125 South First St Brooklyn 11 NY (1)
 ●GUTH (EDWIN F) CO 2615 Washington Blvd St Louis 3 Mo (1-2)—ADV PG 107
 Hexal Products Inc 2332 4th St Berkeley 10 Calif (2)
 Helophane Co Inc 342 Madison Ave New York 17 NY (1-3)
 House-O-Lite Corp 2430 S Ashland Ave Chicago 8 III (1-2)
 Ideal-Simplet Fittings Inc 5136 Park Ave Sycamore III (1)
 Jackson Electrical Co 900 W Van Buren St Chicago 7 III (1)
 K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa (1)
 Keystone Electric Mfg Co 2228 E Tioga St Phila 34 Pa (1)
 Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo (1)
 Kileg Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY (1)
 Kurtzon (Morris) Inc 1420 S Talman Ave Chicago 8, III (1)
 Lancaster Glass Corp Lancaster Ohio (3)
 Lee-Bert Inc 900 Lapeer St Saginaw Mich (1)
 Light & Power Utilities Corp 1035 Firestone Blvd Memphis 7 Tenn (1)
 Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1)
 McKee Div Thatcher Glass Mfg Co Inc Jeannette Pa (3)
 Mid-West Chandler Co 15th & Gentry (P O Box 7365) North Kansas City 16 Mo (3)
 Midwest Lighting Products Corp P O Box 536 Edgewater Branch Cleveland 7 Ohio (1)
 Miller Co Illuminating Div 99 Center St Meriden Conn (1-2)
 MiroFlector Co Inc 40 Bayview Ave Inwood LI NY (1)
 Modern Light Co Inc 7809 Maplewood Industrial Court St Louis 17 Mo (1)
 Multi Electric Mfg Inc 4223 W Lake St Chicago 24 III (1)
 National Cathode Corp 317 E 34 St New York 16 NY (1)
 Overbath & Ayres Mfg Co 411 S Clinton St Chicago 7 III (1)
 Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (1)
 Quadrangle Mfg Co 32 S Peoria St Chicago 7 III (1)
 Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (1)
 Ruby-Philit Corp 32-02 Queens Blvd L I C 1 NY (1-2)
 Russell & Stoll Co Inc 125 Barclay St NY 7 NY (1)
 Spero Electric Corp 20500 St Clair Ave Cleveland 17 Ohio (1)
 Stabrite Fluorescent Mfg Co 3550 Northwest 49 St Miami Fla (1)
 Standard Portable Cord Co Inc Mayville NY (1)
 Steber Mfg Co 2700 Roosevelt Rd Broadview III (1)
 Swiveller Co Inc Nanuet NY (1)
 Versen (Kurt) Co 4 Slocum Ave Englewood NJ (1-2)

Western States Eqt Co P O Box 7211 Oakland 1 Calif (2)
 Westinghouse Electric Corp Lighting Div 1216 W 58th St (P O Drawer 5817) Cleveland 1 Ohio (1)
 Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1)
 Yorkville Metal Products Co 677 Broadway NY 12 NY (1)

9J. MISCELLANEOUS LIGHT SOURCES

1. Radioisotope excited
2. Electroluminescent panels

Sylvania Electric Products Inc 1740 Broadway New York 19 NY (2)
 United States Radium Corp Hanover Ave Morristown NJ (1)
 Westinghouse Electric Corp Lamp Div Bloomfield NJ (2)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
9-1	Desk Lamps; 12p (Acme Lite)
9-2	Hospital Lighting; 8p; Cat. No. HL (Alkco)
9-3	Service Station Lighting; 20p (Columbia Electric)
9-4	Fluorescent Lamps; 8p; Cat. No. 522 (Cooper-Hewitt)
9-5	Digest of Pilot Lights; 16p; Cat. No. L-161 (Dialight)
9-6	Lighting Fixtures; 42p; Cat. No. 17 (Eagle)
9-7	Emergency Lighting Equipment; 8p; Cat. No. 60.00 (Exide)
9-8	Localite Fixtures; 35p (Fostoria)
9-9	Mercury Luminaires; 12p; Cat. No. GEA-6943 (G-E)
9-10	K-Lite Lighting Fixtures; 12p (Kalsan)
9-11	Luminaires and Accessories; 20p; Cat. No. 11 (Kenbert Arpag)
9-12	Contemporary Lamps and Fixtures; 40p; (Koch & Lowy)
9-13	Standard Shallow Troffers; 24p (Kurtzon)
9-14	Lighting; Cat. No. C-258; 14p (LAM)
9-15	The Acousti-Luminous Ceiling; 16 p (Luminous Ceilings)
9-16	Lighting Specs and Budget Guide; 32p (Luminous Ceilings)
9-17	Church & Public Building Lighting; 26p; Cat. No. S (Manning)
9-18	Fluorescent Luminaires; 14p (Miller)
9-19	Industrial Lighting Equipment; 40p (Miller)
9-20	Richmond Fluorescent Luminaires; 34p (Miller)
9-21	Single-Lamp Aluminum Troffers; 36p (Miller)
9-22	Sovereign Fluorescent Luminaire; 24p (Miller)
9-23	New Fashions in Home Lighting; 12p; Cat. No. MM-59 (Minute Mount)
9-24	Engineered Lighting Fixtures; 12p; Cat. No. L-58 (Perfect-Line)
9-25	Residential Lighting; 50p; Cat. No. 104 (Progress)
9-26	Radiant Mercury and Incandescent Lamps; 8p (Radiant Lamp)
9-27	Residential Lighting Equipment; 22p; Cat. No. R-1 (Shalda)
9-28	Lighting Fixtures; 8p; Cat. No. 1959 (Simes)
9-29	Speedomatic Troffers; 30p (Smithcraft)
9-30	The A-B-See of Modern School Lighting; 19p (Smoot-Holman)
9-31	Commercial & Industrial Lighting; Multifunction Ceilings; 56p; Cat. No. C-59 (Wakefield)

SECTION 10. SIGNAL, COMMUNICATING & INDICATING EQUIPMENT

Many of the indicating devices listed below are closely related to industrial processing controls listed in Section 3.

10A. METERS

1. Ammeters, voltmeters & volt-ohmmeters
2. Kva meters
3. Light meters
4. Demand meters
5. Fluxmeters
6. Galvanometers
7. Kilowatt-hour meters
8. Ohmmeters
9. Recording-type meters
10. Power factor meters
11. Tachometers
12. Varmeters
13. Wattmeters
14. Phase angle meters
15. Electrolysis meters
16. Frequency meters
17. Electrostatic meters

Aero Instrument Co 11423 Vanowen St North Hollywood Calif (16)
Airsco Mfg Co Inc 435 Melwood St Pittsburgh 13 Pa (1)
Allen Electric and Equipment Co 2101-2117 N Pitcher St Kalamazoo Mich (1-11-12)
Anchor Mfg Co P O Box 959 Manchester NH (22)
Assembly Products Inc Chesterland 31 Ohio (1)
Associated Research Inc 3789 W Belmont Ave Chicago 18 Ill (11)
Beede Electric Instrument Co Inc Penacook NH (1-6-8-13)
Bergen Laboratories 247 Crooks Ave Clifton NJ (1-8)
●BIDDLE (JAMES G) CO 1316 Arch St Phila 7 Pa (2-6-11-16)—ADV PG 134
Borden Engineering Div M J Johnson Aircraft Engineering Co Box 10 Morristown NJ (6)
Burton-Rogers Co 42 Carleton St Cambridge 42 Mass (1-6)
●COLUMBIA ELECTRIC MFG CO 4519 Hamilton Ave Cleveland 14 Ohio (1)—ADV PG 144
Davenport Mfg Co 2532 N Elston Ave Chicago 47 Ill (1-8)
Davis Electric Co 28 Parker St Wallingford Conn (8)
DeJure-Amsco Corp 4501 Northern Blvd Long Island City 1 NY (1-9)
Durant Mfg Co 1987 No Buffum St Milwaukee 1 Wis (11)
Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1)
Eastern Specialty Co 3617 N 8th St Phila 40 Pa (8-14-22)
Electric Re-Light Co 625 S Goodman St Rochester 20 NY (7)
Electric Tachometer Corp 68th & Upland Sts Phila 42 Pa (11)
Electro-Mechanical Instrument Co 8th & Chestnut Sts Perkasie Pa (1)
Electro-Mechano Co 261 E Erie St EM Milwaukee 2 Wis (11)
EPCO Electronics Inc 140 Liberty St NY 6 NY (1-8)
Esterline-Angus Co Inc P O Box 596 Indianapolis 6 Ind (1-9-10-11-12-13-16)
Fisher Research Laboratory Inc 1961 University Ave Palo Alto Calif (1)
Fleron (M M) & Son 1220 Yardley Rd Morrisville Pa (8)
General Controls Co 801 Allen Ave Glendale Calif (9)
General Electric Co Apparatus Sales Div Schenectady 5 NY (1-4-5-6-7-8-9-10-11-12-13-14-16)
General Radio Co West Concord Mass (8-11)
Gray Instrument Co Mill Rd Andalusia Pa (9)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1)—ADV PG 4
Greibach Instruments Corp Metuchen NJ (1-8)
Hewson Co Inc 443 Broad St Newark 2 NJ (1-8)
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio (1-2-4-5-6-8-10-12-13-14-16)
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (8)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (11)—ADV PG 67-68-69-70
Industrial Devices Inc Edgewater 19 NJ (1)
Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ (2-8)
Industrial Transformer Corp Gouldsboro Pa (8)
Jones Motrola Corp 432 Fairfield Ave Stamford Conn (11)
Kay Electric Co Maple Ave Pine Brook NJ (1)
Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill (1-8)

Kin Tel 5725 Kearney Villa Rd San Diego 12 Calif (1-6)
Knopp Inc 1307 66th St Oakland 8 Calif (17)
Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa (6-8-9)
Letch-Huard Corp Stark & Commercial Sts Manchester NH (1)
Lewis Engineering Co 52 Rubber Ave Naugatuck Conn (9)
Manning, Maxwell & Moore Inc 250 E Main St Stratford Conn (1)
Marion Electrical Instrument Co Grenier Field Manchester NH (1-22)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-10-11-13)
Meters Inc 5353 N Keystone Ave Indianapolis 20 Ind (1-8)
Metron Instrument Co 432 Lincoln St Denver 3 Colo (11)
Minneapolis-Honeywell Regulator Co Boston Div 40 Life St Boston 35 Mass (6)
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Phila 44 Pa (1-4-6-9-10-11-12-13)
Multi-Amp Corp 465 Lehigh Ave Union NJ (8-22)
Partlow Corp 230 Campion Rd New Hartford NY (9)
Peschel Electronics Inc RFD #1 Patterson NY
Pyramid Instrument Corp 630 Merrick Rd Lynbrook NY (1)
Radio Frequency Laboratories Inc Boonton NJ (5-22)
Rattray (George) & Co 116-08 Myrtle Ave Richmond Hills 18 NY (9)
Sangamo Electric Co 11th & Converse Springfield Ill (1-2-4-7-12-13)
Sensitive Research Instrument Corp 310 Main St New Rochelle NY (1-5-6-13-16)
Shallcross Mfg Co Preston St Selma NC (2-6-8-9-15)
Shurite Meters 130 Wallace St New Haven 8 Conn (1)
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill (1-6-8-13)
Snap-on-Tools Corp 8028 28th Ave Kenosha Wis (11)
Southwestern Industrial Electronics Co 2831 Post Oak Rd (PO Box 13058) Houston 19 Tex (1-6-8-11)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (11)
States Co 19 New Park Ave Hartford 6 Conn (22)
Sticht (Herman H) Co Inc 27 Park Place New York 7 NY (1-8-11-16)
Trio Laboratories Inc Expressway Industrial Park Plainville NY (1-14)
Triplett Electrical Instrument Co 286 Harmon Rd Bluffton Ohio (1-2-8-13)
US Gauge Div American Machine & Metals Inc Clymer Ave Sellersville Pa (1)
Wac Line Inc 35 S St Clair St Dayton 2 Ohio (1-11-16-17)
Western Electro-Mechanical Co Inc 300 Broadway Oakland 7 Calif (1-10-14)
Westinghouse Electric Corp P O Box 868 Binghamton 3 Pa (1-4-7 thru 14-16)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-4)—ADV PG 28-28-28
Weston Instruments Div of Daystrom Inc 614 Frellinghuysen Ave Newark 12 NJ (1-2-5-6-8-10-11-13)
Zernickow (O) Co 15 Park Row New York 38 NY (11)

10B. INDICATORS & ALARMS

1. Annunciators
2. Bin level
3. Blown fuse
4. Revolution
5. Current failure
6. Fault & ground
7. Photoelectric
8. Liquid level
9. Peak load
10. Phase sequence
11. Smoke
12. Synchroscopes
13. Temperature
14. Lamp failure
15. Sound level
16. Liquid-flow
17. Counting devices
18. Sprinkler alarms
19. Elapsed time
20. Fire alarm detectors

For associated controls, see "Controls & Control Switches" in Section 3.

Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY (1-6)
Acoustica Associates Inc 26 Windsor Ave Mineola

NY (8)
American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa (7-11-13)
Assembly Products Inc Chesterland 31 Ohio (13)
Associated Research Inc 3789 W Belmont Ave Chicago 18 Ill (10)
Auth Electric Co Inc 34-20 45th St LIC 1 NY (1-6)
Autocall Co 28 Warden Ave Shelby Ohio (1-16-18)
Automatic Control Co 995 University Ave St Paul 4 Minn (1-2-5-8-13)
Automatic Devices Co Inc 714 Hillgrove Ave Western Springs Ill (13)
Automation Products Inc 3030 Max Roy St Houston 24 Tex (8)
B/W Controller Corp 2200 E Maple Rd Birmingham Mich (8)
Bailey Meter Co 1050 Ivanhoe Rd Cleveland 10 Ohio (8-11-13)
Bergen Laboratories 247 Crooks Ave Clifton NJ (19)
Biddle (James G) Co 1316 Arch St Phila 7 Pa (6)
Bin-Dicator Co 13946 Kercheval Ave Detroit 15 Mich (2)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (8-13)
Borden Engineering Div M J Johnson Aircraft Engineering Co Box 10 Morristown NJ (6)
Brunswick Instruments PO Box 813 New Brunswick NJ (10)
Burling Instrument Co Inc 16 River Rd Chatham NJ (13)
Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif (1-6)
Central Station Signals Inc 53 W 23 St New York 10 NY (5-8-11-13)
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (9-11)
Conair Inc PO Box 9671 Pittsburgh 16 Pennsylvania (2)
Couch (S H) Co Inc 3 Arlington St North Quincy 71 Mass (1)
Counter & Control Corp 5225 W Electric Ave Milwaukee 19 Wis (4)
Crouse-Hinds Co Syracuse 1 NY (6-8)
Davenport Mfg Co 2532 N Elston Ave Chicago 47 Ill (6-10)
DeJure-Amsco Corp 4501 Northern Blvd Long Island City 1 NY (13)
Dietz (Henry G) Co Inc 12-16 Astoria Blvd Long Island City 2 NY (7-8)
Durant Mfg Co 1987 No Buffum St Milwaukee 1 Wis (17)
Dwyer (F W) Mfg Co Woodland at Greenwood (PO Box 373) Michigan City Ind (8)
Eastern Specialty Co 3617 N 8th St Phila 40 Pa (10)
Edward Co Inc Norwalk Conn (1-20)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (12)
Electric Tachometer Corp 68th & Upland Sts Phila 42 Pa (4)
Electro-Mechanical Instrument Co 8th & Chestnut Sts Perkasie Pa (5)
Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich (7-11)
Electronics Corp of America One Memorial Dr Cambridge Mass (7-8-11)
Ellenco Inc 3322 M St NW Washington 7 DC (1-6-11-13)
Excel Electric Service Co Inc 2113 S Western Ave Chicago 8 Ill (6)
Fenwal Inc Pleasant St Ashland Mass (13)
Fischer & Porter Co 335 Warminster Rd Hattboro Pa (8)
Fisher Research Laboratory Inc 1961 University Ave Palo Alto Calif (8)
General Controls Co 801 Allen Ave Glendale Calif (4-8-13)
General Electric Co Apparatus Sales Div Schenectady 5 NY (4 thru 13)
Haledy Electronics Co 57 William St NY 5 NY (7-8-16-17)
Healy-Ruff Co Water Level Controls Div 2255 University Ave St Paul 14 Minn (8)
Heat-Timer Corp 657 Broadway New York 12 NY (13)
Hewitt-Robins Inc 666 Glenbrook Rd Stamford Conn (2)
Hewson Co Inc 443 Broad St Newark 2 NJ (6)
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio (13)
Hope Electrical Products Co Inc 27 Long Ave Hillside NJ (8)
Hughey & Phillips Inc 3200 North San Fernando Blvd Burbank Calif (14)
Illinois Testing Laboratories Inc 420 N LaSalle St Chicago 10 Ill (13)
Industrial Devices Inc Edgewater 19 NJ (3)
Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ (2)
Instrument Laboratories 315 W Walton Pl Chicago 10 Ill (6)
Jeffrey Mfg Co 832 N 4 St Columbus 16 Ohio (2)
Jordan Co Inc 9235 West Hampton Ave Milwaukee 9 Wis (7)

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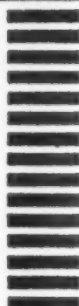
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New York 36, N. Y.

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Kirkland (H R) Co 8 King St Morristown NJ (1)
Knapp Inc 1307 66th St Oakland 8 Calif (10)
Kurman Electric Co 191-193 Newell St Brooklyn 22 NY (7)
Larson Instrument Co 24 Orchard St Tarrytown NY (5-13)
Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa (6-11-13)
Magnetrol Inc 2110 S Marshall Blvd Chicago 23 Ill (8)
Manning, Maxwell & Moore Inc 250 E Main St Stratford Conn (8-13)
Marsh (Jas P) Corp 3501 Howard St Skokie Ill (13)
McDonnell & Miller Inc 3500 N Spaulding Ave Chicago 18 Ill (7-8)
Mechanical Industries Production Co 217-223 Ash St Akron 8 Ohio (13)
Mercol Corp 4201 W Belmont Ave Chicago 41 Ill (13)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (4)
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windm Aves Phila 44 Pa (7-8-13)
Neison Electric Mfg Co PO Box 5385 Tulsa Okla (1-5-6)
New Jersey Meter Co Inc 350 Leland Ave Plainfield NJ (16)
O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 3 Calif (1)
Opad Electric Co 43 Walker St New York 13 NY (10)
Panalarm Div Panellit Inc 7401 N Hamlin Ave Skokie Ill (1)
Panellit Inc 7401 N Hamlin Ave Skokie Ill (1)
Parr Mfg Corp 48 Hale St Cranford NJ (6)
Partick & Wilkins Co 51 N Seventh St Phila 6 Pa (1)
Performance Measurements Co 15301 W McNichols Detroit 35 Mich (16)
Pesche Electronics Inc RFD #1 Patterson NY (5-6)
Photobell Co Inc 43 Vesey St New York 7 NY (8-11)
Photomation Inc 96 S Washington Ave Bergenfield NJ (2-4-7-11-16)
Post Machinery Co Electronic Products Div 140 Elliott St Beverly Mass (7-17)
Prometer Instrument Co Bergenfield NJ (13)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (6)
Scam Instrument Corp 1811 W Irving Pk Rd Chicago 13 Ill (1)
Scott (H H) Inc 111 Powder Mill Rd Maynard Mass (15)
Scovaco Mfg Co 201 Greene Ave Middlesex NJ (2)
Sell (H H) Electric Co 3240 Dakota Ave Minneapolis 16 Minn (10)
Shallcross Mfg Co Preston St Selma NC (6)
Simmonds Accessories Inc Tarrytown NY (8)
Sperti Faraday Inc 1322 E Church St Adrian Mich (1)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (1-4)
Stewart Bros Div Instrument Laboratories 315 W Walter Pl Chicago 10 Ill (6)
Sticht (Herman H) Co Inc 27 Park Place New York 7 NY (10)
Superior Interlock Corp 75-39 Central Ave Glendale 2 NY (1)
Tigerman Engineering Co 4332 N Western Ave Chicago 18 Ill (1)
Tobe Deutschmann Corp Providence Highway Norwood Mass (6)
Trimount Instrument Co 3119 W Lake St Chicago 12 Ill (8)
United Mfg Co 41 Haig St Hamden 14 Conn (10)
US Gauge Div American Machine & Metals Inc Clymer Ave Sellersville Pa (13)
Veeder-Root Inc 70 Sargeant St Hartford 2 Conn (17)
Viking Instruments Inc East Haddam Conn (1-8-13)
Wac Line Inc 35 S St Clair St Dayton 2 Ohio (6)
Walkirt Co 141 W Hazel St Inglewood 3 Calif (4)
Wallace & Tiernan Inc 25 Main St Belleville NJ (7-8)
Warrick (Chas F) Co 1964 W Eleven Mile Rd Berkley Mich (8)
Wessler Instrument Corp 195 E Merrick Rd Freeport LI NY (13)
West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill (13)
Western Electro-Mechanical Co Inc 300 Broadway Oakland 7 Calif (10)
Westinghouse Electric Corp PO Box 868 Pittsburgh 30 Pa (6-8)
Weston Instruments Div of Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ (13)
White-Rodgers Co 1209 Cass Ave St Louis 6 Mo (13)
Worner Electronic Devices Rankin Ill (1-2-3)
Yellow Springs Instrument Co Inc PO Box 106 Yellow Springs Ohio (13)

10C. TESTERS

1. Growlers
2. Circuit analyzers
3. Protective device analyzers

4. Magnetos
5. Dynamometers
6. Continuity testers
7. Fluorescent unit testers
8. Insulation testers
9. Turns-ratio testers
10. Polarity testers
11. Cable & metal locators
12. Cable fault locators
13. Voltage testers
14. Coil testers
15. Bridges
16. Ground resistance testers
17. Stroboscopes
18. Oscilloscopes

Airserco Mfg Co Inc 435 Melwood St Pittsburgh 13 Pa (2)
Associated Research Inc 3789 W Belmont Ave Chicago 18 Ill (8-16)
Barry Controls Inc 733 Pleasant St Watertown Mass (11)
Berkshire Laboratories 942 Bank Village Greenville NH (17)
●BIDDLE (JAMES G) CO 1316 Arch St Phila 7 Pa (8-9)—ADV PG 134
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (2)
Borden Engineering Div M J Johnson Aircraft Engineering Co Box 10 Morristown NJ (2-8-11)
Bright Star Industries 600 Getty Ave Clifton NJ (6)
Cincinnati Clock & Instrument Co 1117 Harrison Ave Cincinnati 14 Ohio (3)
Crown Industrial Products Co 713 Amsterdam St Woodstock Ill (5)
Davenport Mfg Co 2532 N Elston Ave Chicago 47 Ill (2-8)
Dice (J W) Co Englewood NJ (8-6-10)
Fagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (2)
Erwood Inc 1770 Berteau Ave Chicago 13 Ill (2)
Fisher Research Laboratory Inc 1961 University Ave Palo Alto Calif (11)
General Electric Co Apparatus Sales Div Schenectady 5 NY (2-3-4-5-8-15)
General Radio Co West Concord Mass (15-17)
Goldak Co Inc 1544 W Glenoaks Blvd Glendale 1 Calif (11)
Gray Instrument Co Mill Rd Andalusia Pa (15)
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio (5-17-18)
Holub Industries Inc 442 Elm St Sycamore Ill (6)
Hughes Products Hughes Aircraft Co International Airport Station Los Angeles 45 Calif (18)
Ideal Industries Inc 5136 Park Ave Sycamore Ill (2-8)
Industrial Development Labs Inc 982 River Rd Edgewater NJ (15)
Instrument Laboratories 315 W Walton Pl Chicago 10 Ill (2)
Jackson Electrical Instrument Co 18 S Patterson Blvd Dayton 2 Ohio (2-18)
Kiv Electric Co Maple Ave Pine Brook NJ (2)
Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa (15)
Martindale Electric Co 1383 Hlrd Ave Cleveland 7 Ohio (1-2-8-13-14)
Meters Inc 5353 N Keystone Ave Indianapolis 20 Ind (2)
Multi-Amp Corp 465 Lehigh Ave Union NJ (3)
Nankervis (Geo L) Co 15300 Fullerton Ave Detroit 27 Mich (5)
Parr Mfg Corp 48 Hale St Cranford NJ (11)
Pesche Electronics Inc RFD #1 Patterson NY (2)
●PLASTER-EYE CO 2560 Noblistown Rd Pittsburgh 5 Pa (11-12)—ADV PG 161
Potter & Rayfield Inc PO Box 1042 Atlanta Ga (1-5)
Principle Research & Development Corp 200 Citizens Bldg Aberdeen SD (12)
Rogers Electric Laboratories Inc 2651 Shaker Rd Cleveland Hts 18 Ohio (11)
Schauer Mfg Corp 4500 Alpine Ave Russmoyne Ohio (1)
Shallcross Mfg Co Preston St Selma NC (11)
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill (2-8-18)
Sittler Corp 18 N Ada St Chicago 7 Ill (2)
Slaughter Co College & Young Sts Piqua 5 Ohio (8-17)
Snap-On Tools Corp 8028 28th Ave Kenosha Wis (1)
Southwestern Industrial Electronics Co 2831 Post Oak Rd (PO Box 13058) Houston 19 Tex (15-18)
Speedex Mfg Co 418 S Wyman St Rockford Ill (2)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (5)
Stewart Bros Div Instrument Laboratories 315 W Walton Pl Chicago 10 Ill (2-11)
Sticht (Herman H) Co Inc 27 Park Pl New York 7 NY (2-15-17)
Tektronix Inc PO Box 831 Portland 7 Ore (18)
Triplett Electrical Instrument Co 286 Harmon Rd Bluffton Ohio (18)
United States Rubber Co 1230 Avenue of the Americas New York 20 NY (11)
Waterman Products Co Inc 2445-63 Emerald St Phila 25 Pa (18)
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (1-2)
Westinghouse Electric Corp PO Box 868 Pittsburgh 30 Pa (2)

●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)
—ADV PG 2nd COVER
Whitney Blake Co 102 Purshing St New Haven 14 Conn (12)

10D. BURGLAR ALARM SYSTEMS

1. Residential
2. Commercial & industrial
3. Fence & boundary

American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa (2)
Auth Electric Co Inc 34-20 45th St LIC 1 NY (2)
Bogen-Presto Co Route 4 & Forest Ave (PO Box 500) Paramus NJ (2)
Central Station Signals Inc 53 W 23 St New York 10 NY (1-2-3)
●EDWARDS CO INC Norwalk Conn (1-2)—AD PG 82-83
Industrial Automation Corp 2415 W Montrose Ave Chicago 11 Ill (1-2)
Kidde Ultrasonic & Detection Alarms Inc 459 Brighton Rd Allwood Station Clifton NJ (1-2-3)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (2-3)
Patrick & Wilkins Co 51 N Seventh St Phila 6 Pa (1-2-3)
Photobell Co Inc 43 Vesey St New York 7 NY (1-2-3)
Recora Co Inc Powis Rd (Box 68) St Charles Ill (1-2)
Reeve Electrical Co Inc 120 W 42nd St New York 36 NY (2)
Worner Electronic Devices Rankin Ill (1-2-3)

10E. FIRE ALARM SYSTEMS

1. Residential
2. Commercial & industrial

Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY (2)
American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa (2)
Auth Electric Co Inc 34-20 45th St LIC 1 NY (1-2)
Autocal Co 58 Warden Ave Shelby Ohio (2)
Automatic Control Co 995 University Ave St Paul 4 Minn (2)
Castle Engineering Co PO Box 35 Seneca Castle NY (1-2)
Central Station Signals Inc 53 W 23 St New York 10 NY (2)
●COUCH (S II) CO INC 3 Arlington St North Quincy 71 Mass (2)—ADV PG 140
●EDWARDS CO INC Norwalk Conn (1-2)—ADV PG 82-83
Electronics Corp of America One Memorial Dr Cambridge Mass (2)
Ellenco Inc 3322 M St NW Washington 7 DC (2)
Federal Sign & Signal Corp 13626 S Western Ave Blue Island Ill (2)
Fire Alarm Thermostat Corp 53 W 23 St New York 10 NY (1-2)
Fire Detective Inc 300 Chancellor Ave Newark 12 NJ (1-2)
Gamewell Co Newton Upper Falls 64 Mass (2)
Industrial Automation Corp 2415 W Montrose Ave Chicago 11 Ill (1-2)
International Business Machines Corp Times Equipment Div 590 Madison Ave New York 22 NY (2)
Kidde Ultrasonic & Detection Alarms Inc 459 Brighton Rd Allwood Station Clifton NJ (1-2)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (2)
National Time & Signal Corp 21800 Wyoming Ave Detroit 37 Mich (2)
Newark District Telegraph Co 372 Plane St Newark 2 NJ (2)
Patrick & Wilkins Co 51 N Seventh St Phila 6 Pa (2)
Reeve Electrical Co Inc 120 W 42nd St New York 36 NY (2)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (2)
SAFA Alarm Div Inc Fyr-Fyter Co PO Box 1118 Newark NJ (2)
Sperti Faraday Inc 1322 E Church St Adrian Mich (2)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (2)
Stromberg Time Corp 135 S Main St Thomaston Conn (2)
Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)
●WHEELLOCK SIGNALS INC Branchport Ave Long Branch NJ (2)—ADV PG 167
Worner Electronic Devices Rankin Ill (1-2)

10F. SIGNAL & COMMUNICATION SYSTEMS

1. Calling, paging & locating systems
2. In-and-out registers
3. Intercom systems and equipment
4. Public address systems
5. Closed circuit TV
6. Master antenna systems & accessories
7. Private telephone systems
8. Two-way radio systems
9. Sound-powered telephones

Adcrafters Co 325 W Huron St Chicago 10 Ill (1-3-4)
 American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa (1-4)
 Auth Electric Co Inc 34-20 45th St LIC 1 NY (1-2-3-8)
 Autocall Co 58 Warden Ave Shelby Ohio (1)
 Automatic Electric Co Northlake Ill (3-7)
 Bell Sound Systems Inc 555 Marion Rd Columbus 7 Ohio (4)
 Bliss Electronic Corp Sussex NJ (2-3-4)
 Blonder-Tongue Laboratories Inc 9-25 Ailing St Newark 2 NJ (5-6)
 Bogen-Presto Co Route 4 & Forest Ave (P O Box 500) Paramus NY (1-3-4)
 Califfone Corp 1041 N Sycamore Ave Hollywood 38 Calif (4)
 Cannon Electric Co 3208 Humboldt St Los Angeles 33 Calif (1-2)
 ●COUCH (S H) CO INC 3 Arlington St North Quincy 71 Mass (1-2-3-8)—ADV PG 140
 Dalmotorn Co 534 Laurel St San Carlos Calif (1-3-4-6)
 Diamond Power Specialty Corp P O Box 415 Lancaster Ohio (5)
 DuKane Corp St Charles Ill (1-3-4-8)
 ●EDWARDS CO INC Norwalk Conn (1-2-3)—ADV PG 82-83
 Executone Inc 415 Lexington Ave NY 17 NY (1-3-4)
 Fanon Electronic Industries Inc 98 Berriman St Brooklyn 8 NY (3-7)
 Feller Engineering & Mfg Co 8026 N Monticello Ave Skokie Ill (3)
 Femco Inc Irwin Pa (3-7)
 Fisher Berkeley Corp 4224 Holden St Emeryville Calif (3)
 General Electric Co Industrial Electronics Div Technical Products Dept Electronics Park Syracuse NY (5)
 Godfrey Mfg Co 1633 N Halsted St Chicago 16 Ill (3)
 ●HOSE-MCCANN TELEPHONE CO INC 25th St & 3rd Ave Brooklyn 32 NY (3-9)—ADV PG 157
 Insul-8-Corp 1369 Industrial Rd San Carlos Calif (5)
 International Business Machines Corp Times Equipment Div 590 Madison Ave New York 22 NY (7)
 International Telephone & Telegraph Corp Industrial Products Div 15191 Bledsoe St San Fernando Calif (5)
 Javex PO Box 646 Redlands Calif (6)
 Jerrold Electronics Corp 23rd & Chestnut Sts Phila 3 Pa (1-5-6)
 Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill (3-4)
 Kin Tel 5725 Kearney Villa Rd San Diego 12 Calif (5)
 Kirkland (H R) Co 8 King St Morristown NJ (1-2)
 Lake Mfg Co 2323 Chestnut St Oakland Calif (3-4)
 Lodge (J M) Sound Engineers 2171 W Washington Blvd Los Angeles 18 Calif (1-3-4)
 Lovsted (CM) & Co Inc 4000 W Marginal Way Seattle 6 Wash (1)
 Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa (3)
 Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (3)
 Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill (1-8)
 Newcomb Audio Products Co 6824 Lexington Ave Hollywood 38, Calif (1-4)
 ●NUTONE INC Madison & Red Bank Roads Cincinnati 27 Ohio (3)—ADV PG 1-2
 O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif (1-3-4)
 Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (1-2)
 Perfect-Line Mfg Corp Old Country Rd & Railroad Ave PO Box 65 Hicksville LI NY (3)
 Progress Mfg Co Inc Castor Ave & Tulip St Phila 34 Pa (3)
 Radio Corp of America Industrial Electronic Products Front & Cooper Sts Camden 2 NJ (1-3-4-5-6)
 Rauland-Borg Corp 3535 West Addison St Chicago 18 Ill (1-3-4)
 Rittenhouse Co Inc East St Honeoye Falls NY (3)
 Simpson (Mark) Mfg Co Inc 32-28 49th St Long Island City 3 NY (1-3-4)
 Spertl Faraday Inc 1322 E Church St Adrian Mich (1-2-5)
 Standard Electric Time Co 89 Logan St Springfield 2 Mass (1-2)
 Talk-A-Phone Co 1512 S Pulaski Rd Chicago 23 Ill (3)
 Webster Electric Co 1900 Clark St Racine Wis (3-4-7)
 Wheeler Electronic Corp 150 E Aurora St Waterbury 20 Conn (3-8)

Wheelock Signals Inc Branchport Ave Long Branch NJ (1)
 Worner Electronic Devices Rankin Ill (3)

10G. SOUNDING DEVICES

1. Bells
2. Buzzers
3. Gongs
4. Horns
5. Whistles
6. Chimes
7. Sirens

Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY (3-6)
 Auth Electric Co Inc 34-20 45th St LIC 1 NY (1-2-3-4-6-7)
 Autocall Co 58 Warden Ave Shelby Ohio (1-3-4-6)
 Cable Electric Products Inc 234 Daboll St Providence 7 RI (1-2-6)
 Clark-Cooper Co Inc 317 N Market St Palmyra NJ (4-5)
 Couch (S H) Co Inc 3 Arlington St North Quincy 71 Mass (1-2-3-4)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1-2)
 ●EDWARDS CO INC Norwalk Conn (1-2-3-4-6-7)—ADV PG 82-83
 Ellenco Inc 3322 M St NW Washington 7 DC (1 through 7)
 ●FEDERAL SIGN & SIGNAL CORP 13626 S Western Ave Blue Island Ill (1 thru 7)—ADV PG 156
 Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (1-2)
 Hose-McCann Telephone Co Inc 25th St & 3rd Ave Brooklyn 32 NY (1-2-3)
 International Business Machines Corp Times Equipment Div 590 Madison Ave New York 22 NY (1-2-3-4-6-7)
 ●INTERNATIONAL REGISTER CO 2620 W Washington Blvd Chicago 12 Ill—ADV PG 110
 Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill (1-2-3-4-6-7)
 Lake Mfg Co 2323 Chestnut St Oakland Calif (1-2)
 Lee Electric Inc 566 52nd St West New York NJ (1-2-3-6)
 Liberty Bell Mfg Co Inc Swainsboro Ga (1-2-3-6)
 Line Electric Co 271 South Sixth St Newark 3 NJ (2)
 Lumenite Electronic Corp 407 S Dearborn St Chicago 5 Ill (1-2-4-7)
 Marvin Electric Mfg Co 648 Santa Fe Ave Los Angeles 21 Calif (6)
 National Time & Signal Corp 21800 Wyoming Ave Detroit 37 Mich (1-2-3-4-6)
 Nutone Inc Madison & Red Bank Roads Cincinnati 27 Ohio (6)
 Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (1-2-3-4-6-7)
 Portable Light Co Inc 216 William St NY 38 NY (7)
 Progress Mfg Co Inc Castor Ave & Tulip St Phila 34 Pa (6)
 Reeve Electrical Co Inc 120 W 42nd St New York 36 NY (1-2-3)
 Rittenhouse Co Inc East St Honeoye Falls NY (6)
 Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (1-2)
 Sireno Co Inc 214 William St New York 38 NY (7)
 Spertl Faraday Inc 1322 E Church St Adrian Mich (1-2-4-6-7)
 Spies Electric Works 564 W Van Buren St Chicago 7 Ill (1)
 Standard Electric Time Co 89 Logan St Springfield 2 Mass (1-2-3-4-6)
 Suttle Equipment Corp 135 S LaSalle St Chicago 3 Ill (1)
 Trine Mfg Corp 1430 Ferris Place New York 61 NY (1-2)

●VICTOR VENTILATOR DIV PHILIP CAREY MFG CO Middletown Ohio (6)—ADV PG 128
 Viking Instruments Inc East Haddam Conn (1-2-3-4-7)
 Wheelock Signals Inc Branchport Ave Long Branch NJ (1 thru 6)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
10-1	Waterflow Systems and Sprinkler Supervisory Devices; 14p (Autocall)
10-2	Basic Circuits for Telephony; 32p (Automatic Electric)
10-3	Electrical Instruments; 20p (Burton-Rogers)
10-4	Tong Test Ammeters; 8p (Columbia Electric)
10-5	Modular Fire Alarm Systems; 26p; Cat. No. 131A (Couch)
10-6	Private Telephone Systems; 16p; Cat. No. 133A (Couch)
10-7	Test Units and Meters; 20p (Davenport)
10-8	Signal Log; 44p (Edwards)
10-9	Meter Buyers' Guide, 1959; 64p; Cat. No. GEC-1400B (General Electric)
10-10	Elektronik Recorders & Indicators; 40p; Cat. No. C 15-1 (Minneapolis-Honeywell)
10-11	Instruments for Electrical Power Generation; 32p; Cat. No. 9070 (Minneapolis-Honeywell)
10-12	Handie-Talkie 2-Way Pocket Radio; 4p (Motorola)
10-13	Motrac 2-Way Radio; 4p (Motorola)
10-14	Portable Test Sets for Oil Circuit Reclosers; 8p; Cat. No. SB-OCR-1 (Multi-Amp)
10-15	How the Illusion of an Acoustically Perfect Auditorium Is Created; 12p (RCA)
10-16	Electrical Measuring Instruments; 16p; (Sensitive Research)
10-17	Panel Instruments; 8p; Cat. No. 59-1 (Triplett)
10-18	Test Equipment; 8p; Cat. No. 38-T (Triplett)
10-19	Electrical Meters and Accessories; 8p; Cat. No. 81100 (Wac)
10-20	Long Scale Instruments; 8p (Weston)
10-21	Panel Instruments; 27p; Cat. No. 01-100-A (Weston)

SECTION 11. HEATING & COOLING EQUIPMENT

11A. ELECTRIC SPACE HEATERS

1. Wall panels & units
2. Ceiling panels & units
3. Ceiling & floor cables
4. Baseboard units
5. Floor furnaces
6. Duct heaters
7. Steam radiators
8. Unit heaters, forced air
9. Central furnaces
10. Portables
11. Heated floor mats
12. Heater & lighting fixture combined

For space heating of buildings, industrial and commercial heating equipment is listed under "Electric Process Heating". See also "Heat Pumps."

Acme Electric Heating Co 1217 Washington St Boston 18 Mass (1-4-7-10)
 Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (1)
 Aeroli Products Co Inc 69 Wesley St South Hackensack NJ (8)
 Allied Precision Industries 425 Stevens St (PO Box 149) Geneva Ill (1-10)
 American Tool & Engineering 2105 Moore St San Diego Calif (4)
 Ampers Industries 60 Boston St Newark 3 NJ (1-2-4-10)
 ●BERKO ELECTRIC MFG CORP 212-40 Jamaica Ave Queens Village 28 NY (1-2-4-10)—ADV PG 148
 Berns Air King Corp 3050 N Rockwell St Chicago Ill (1-2)
 Broan Mfg Co Inc Hartford Wis. (8-12)
 Brown Products Corp 1090 Springfield Rd Union NJ (4)

Can Arm Corp P O Box 156 Champlain NY (1-4-10)
 Carrier Corp Carrier Parkway Syracuse 1 NY (8)
 Cavalier Corp Electric Heating Div 343 W First St Chattanooga Tenn (1-3-4-5-10)
 Ceriheat Inc 5212 Homberg Drive Knoxville Tenn (1-3-4-8-10)
 Circle Air Industries Inc 244 Herkimer St Brooklyn 16 NY (1-4-8-10)
 Clavage Fan Co Kalamazoo Mich (8)
 Continental Radiant Glass Heating Corp 1 E 35th St NY 16 NY (1-2-4-10)
 Dixie Raydiant Electric Heat Corp 66 Eleventh St NE Atlanta 9 Ga (1-2-3-10)
 Electrend Products Corp State & Waters Sts St Joseph Mich (1-8)
 Electric Steam Radiator Corp 1 Electric Ave Paris Ky (7-10)
 Electro-Products Mfg Co 8310 NE Highway 99 Vancouver Wash (4)
 ●ELECTROMODE DIV COMMERCIAL CONTROLS CORP P O Box 1052 Rochester 3 NY (1-3-4-8-10)—ADV PG 108
 Electrowector Inc 475 Flushing Ave Brooklyn 5 NY (1-4)
 Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo (10)
 Emerson-Pryne Co 140 N Towne Ave (P O Box 698) Pomona Calif (2)
 Everwarm Inc 3600 Pleasant Ridge Rd Knoxville Tenn (1-3-10)
 General Alliance Corp 2105 Moore St San Diego Calif (4)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (8-10)
 General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (3-4-8)
 Guyan Machinery Co Inc Box 150 Logan W. Va. (1-10)
 Heatmore Inc 651 Driggs Ave Brooklyn 11 NY (1-2-4-10)
 Hotpoint Co 5600 W Taylor St Chicago 44 Ill (4)
 Hunter Div Robbins & Myers Inc 2500 Frisco Ave Memphis 14 Tenn (1-4-10)
 Jlg Electric Ventilating Co 2850 N Pulaski Rd Chicago 41 Ill (8)
 Industrial Engineering & Equipment Co Inc 24 Hanley Industrial Court St Louis 17 Missouri (6)
 International Oil Burner Co 3800 Park Ave St Louis 10 Mo (4)
 Interstate Rubber Products Corp 908 Avila St Los Angeles 12 Calif (11)
 Kilbury Mfg Co Inc 14529 Hawthorne Blvd Lawndale Calif (8-9)
 Knapp-Monarch Co Bent & Potomac St Louis 16 Mo (10)
 Kord Mfg Co Inc 4510 White Plains Rd New York 70 NY (10)
 Markel Electric Products Inc 145 Seneca St Buffalo 3 NY (1-2-4-8-10)
 Mathews Electric Heater Mfg Co. Albertville Ala (1-5-10)
 Meier Electric and Machine Co Inc 3525 E Washington St Indianapolis 7 Ind (1-3-10)
 Mission Appliance Corp Hyde Park Station Los Angeles 43 Calif (1-2)
 Modernheat Cable Corp P O Box 576 Kingsport Tenn (1-3-10)
 Nutone Inc Madison & Red Bank Roads Cincinnati 27 Ohio (2-8)
 Preway Inc 1430 Second St North Wisconsin Rapids Wis (10)
 Quartz Products Corp 688 Somerset St (P O Box 628) Plainfield NJ (8)
 Ramco Mfg & Engineering 5413 NE Columbia Blvd Portland Ore (1-4)
 Roberson Inc 1539 E 103 St Seattle 55 Wash (1-5-10)
 Salton Mfg Co Inc 312 E 95 St New York 28 NY (2-10)
 Seaboard Products Corp Electric Heating Division 191 Frelinghuysen Ave Newark New Jersey (4-10)
 Siebring Mfg Co George Iowa (9)
 Sun-Tron Corp 7435 W Wilson Ave Chicago 31 Ill (1-2-4)
 Sunwarm Inc 2353 Ft Henry Dr (Box 263) Kingsport Tenn (1-3-4-10)
 Swan Mfg Co 1801 W 26 St Vancouver Wash (1-4)
 Thermador Electrical Mfg Co 5119 District Blvd Los Angeles 22 Calif (1-8-10)
 Thermal Aire Inc 510 Cambridge St Boston (Allston) Mass (1-2-4)
 Trade-Wind Motors Inc 7755 Paramount Blvd Rivera Calif (1)
 Victor Ventilator Div Philip Carey Mfg Co Middletown Ohio (8)
 Vulcan Radiator Co 775 Capitol Ave Hartford 6 Conn (4)
 Wesix Electric Heater Co 390 First St San Francisco 5 Calif (1 thru 6-8-10)
 Westchester Brickette Products Co Inc 1528 Williamsbridge Rd NY 61 NY (7)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (1-2-3-8-10)
 ●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-4-8-10)—ADV PG 2nd Cover
 ●WIEGAND (EDWIN L) CO 7637 Thomas Blvd Pittsburgh 8 Pennsylvania (1 thru 6-8-10)—ADV PG 133
 Wing (L J) Mfg Co 303 N Stiles St Linden NJ (8)
 Zell-Air Corp Orrton Ave Reading Pennsylvania (1-3-4-8)

11B. HEAT PUMPS

Central, packaged, or custom dual-function units for space heating and cooling of buildings.

Acme Industries Inc 620 N Mechanic St Jackson Mich
 American Coils Co Route 524—Lakewood Rd Farmingdale NJ
 Carrier Corp Carrier Parkway Syracuse 1 NY
 Coolerator Div McGraw-Edison Co 704 Clark St N Albion Mich (118)
 Fedders Corp 58-01 Grand Ave Maspeth NY (118)
 Forston Co 2117-2119 Judiway (P O Box 10231) Houston 18 Tex (118)
 General Electric Co Air Conditioning Div Weather-iron Dept 5 Lawrence St Bloomfield NJ
 General Electric Co Appliance & Television Receiver Div Room Air Conditioner Dept Appliance Park Louisville 1 Ky
 Perfection Industries Div Hupp Corp 1135 Ivanhoe Cleveland 10 Ohio
 Mueller Climatrol Div Worthington Corp 2005 W Oklahoma Ave Milwaukee 1 Wisc
 York Div Borg-Warner Corp Grantley Rd York Pa

11C. ELECTRIC PROCESS HEATING EQUIPMENT

1. Electric ovens
2. Electric furnaces
3. Electric steam boilers
4. Dielectric heaters
5. Induction heaters
6. Infrared heaters
7. Heating elements
8. Soil & pipe cable or tape
9. Wire preheaters
10. Immersion heaters

Electrical equipment used to provide heat for commercial or industrial processes.

Acme Electric Heating Co 1217 Washington St Boston 18 Mass (1-7)
 Acra Electric Corp 9901 Pacific Ave Franklin Park Ill (7)
 Ajax Electrothermic Div Ajax Electrothermic Corp Ajax Park Trenton 5 NJ (1-2-5)
 Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-4-5)
 Bellevue Industrial Furnace Co 2620 Crane Ave Detroit 14 Mich (1-2)
 Blue M Electric Co 138th & Chatham Sts Blue Island Ill (1-2)
 Can Arm Corp P O Box 156 Champlain NY (6-7)
 Coates Electric Mfg Co 3419-11th Ave S W Seattle 4 Wash (1-2-3)
 Coolerator Div McGraw-Edison Co 704 Clark St N Albion Mich (7)
 Corning Glass Works Corning NY (6-7)
 Corona Mfg Corp 11300 Tuxford St Sun Valley Calif (1-6-7)
 Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (7)
 Dalton Electric Heating Co 11 Goodhue St Salem Mass (7)
 Despatch Oven Co 619 S E 8th St Minneapolis 14 Minn (1-2-7)
 Detroit Electric Furnace Div Kuhlman Electric Co Bay City Mich (2)
 Doyle (J E) Co 1220 W 6th St Cleveland 13 Ohio (6)
 Dry Climate Lamp Corp Greensburg Ind (1-7)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (7)
 Electric Arc Inc 152 Jelliff Ave Newark 8 NJ (1-2-5)
 Electric Hotpack Co Inc Cottman Ave at Melrose St Phila 35 Pa (1-2)
 ●ELECTROMODE DIV COMMERCIAL CONTROLS CORP P O Box 1052 Rochester 3 NY (8)—ADV PG 108
 Everwarm Inc 3600 Pleasant Ridge Rd Knoxville Tenn (7)
 Faicon Equipment Co 13th St (Box E-255) New Brighton Pa (1-2-7)
 Fostoria Pressed Steel Corp N Main St Fostoria Ohio (1-6)
 Fox Products Co 4720 N 18 St Phila 41 Pa (7)
 Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (7)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (5-7)
 Globar Div Carborundum Co Niagara Falls NY (7)
 Grieve-Hendry Co Inc 1401-17 W Carroll Ave Chicago 7 Ill (1-2)
 Harper Electric Furnace Corp 39 River St Buffalo 2 NY (2)
 Hayes (C I) Inc 800 Wellington Ave Cranston 10 RI (1-2-5)
 Heatube Dept. Coolerator Div McGraw-Edison Co Albion Mich (7)
 Hevi Duty Electric Co P O Box 563 Milwaukee 1 Wis (1-2-7)
 Huppert (K H) Co 6830 S Cottage Grove Ave Chicago 37 Ill (1-2-7)
 Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY (1-4-5)

Industrial Engineering & Equipment Co Inc 24 Hanley Industrial Ct St Louis 17 Mo (7)
 Jensen Inc 9331 Freeland Ave Detroit 28 Mich (1)
 Kneisley Electric Co 2501-2509 Lagrange St Toledo 3 Ohio (10)
 Kord Mfg Co Inc 4510 White Plains Rd New York 70 NY (7)
 LaRose (W T) & Associates Inc 31 Ontario St Cohoes NY (4)
 Lindberg Engineering Co 2450 W Hubbard St Chicago 12 Ill (1-2)
 Lucifer Furnaces Inc Neshaminy Pa (2)
 Modernheat Cable Corp P O Box H Youngstown 7 Ohio (5)
 Michigan Oven Co 415 Brainerd Detroit 1 Mich (1)
 Midget Heater & Specialty Co 2801 Pacific Ave Tacoma 4 Wash (7)
 Miskella Infra-Red Co E 73rd & Grand Ave Cleveland 4 Ohio (1-6)
 Modernheat Cable Corp P O Box 576 Kingsport Tenn (8)
 Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (8)
 North American Electric Lamp Co 1520 North 13th St St Louis 6 Mo (1-6)
 Pereny Equipment Co 893 Chambers Rd (Station A Box 8135) Columbus Ohio (1-2)
 Potter & Rayfield Inc P O Box 1042 Atlanta Ga (1)
 Pyrosil Inc 1889 Front St Cuyahoga Falls Ohio (1-6-7)
 Reeve Electronics Inc 609 W Lake St Chicago 6 Ill (4-5)
 Roberson Inc 1539 E 103 St Seattle 55 Wash (8)
 Safe-way Heat Elements Inc Newfield St (P O Box 1109) Middletown Conn (7)
 Scientific Electric Inc 105-109 Monroe St Garfield NJ (4-5)
 Sherman Industrial Electronics Div of Engineering Design Inc 108 N Gill St State College Pa (1-4-5)
 Siebring Mfg Co George Iowa (3-7)
 Smith-Gates Corp Farmington Conn (8)
 Southeast Lighting Inc 521 E 20 St Charlotte 1 NC (6)
 Sta-Warm Electric Co 53 N Chestnut St Ravenna Ohio (1-2)
 Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (7)
 Steiner-Ives Co Springfield Rd Union NJ (1)
 Tec Imports 14525 Bessemer St Van Nuys Calif (6)
 Thermal American Fused Quartz Co 18 Salem St Dover NJ (7)
 Thermo Electric Mfg Co 465 Huff St Dubuque Iowa (2)
 Tocco Div Ohio Crankshaft Co 3800 Harvard Ave Cleveland 5 Ohio (5)
 Trent Inc 201-299 Leverington Ave Phila 27 Pa (1-2-7)
 Triangle Equipment Co Inc 45 River Rd Nutley 10 NJ (1-6)
 Trindl Products Ltd 1807-11 S Clark St Chicago 16 Ill (7)
 Tripple Mfg Co 133 N Jefferson St Chicago 6 Ill (6)
 Tuttle & Kift Inc 1823 N Monitor St Chicago 39 Ill (7)
 Ulanet (George) Co 413-15 Market St Newark 5 NJ (7)
 Velotek Inc 1186 Broadway New York 1 NY (1-6)
 Vulcan Electric Co 88 Holten St Danvers Mass (7)
 Waage Electric Inc 720 Colfax Ave Kenilworth NJ (7)
 Walco Electric Co 131 Blackstone St Providence 1 RI (9)
 Watlow Electric Mfg Co 1376 Ferguson Ave St Louis 14 Mo (7)
 Welcraft Products Co Inc New Carlisle Ind (8)
 Wesix Electric Heater Co 390 First St San Francisco 5 Calif (6-7-8)
 Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (5-6)
 Whitaker (Douglas C) Co Inc 141 E Glenside Ave Glenside Pa (6)
 ●WIEGAND (EDWIN L) CO 7637 Thomas Blvd Pittsburgh 8 Pa (6-7)—ADV PG 133
 Wil-Son Mfg Co Cloverport Ky (1-6)
 Young Bros Co 1831 Columbus Rd Cleveland 13 Ohio (1-4)

11E. AIR CONDITIONERS

1. Industrial & commercial
2. Residential, central unit
3. Residential, room console
4. Wall, built in
5. Window
6. Portable

Equipment using refrigerating-cycle principle to cool air.

Acme Industries Inc 620 N Mechanic St Jackson Mich (1-2)
 Air & Refrigeration Corp 439 Madison Ave New York City NY (1)
 Airtemp Div Chrysler Corp 1600 Webster St Dayton 1 Ohio (1-2-4-5)

American Coils Co. Route 524 Lakewood Rd Farm-
indale NJ (1-2)
American-Standard Industrial Div Detroit 32
Mich (1)
Carrier Corp Carrier Parkway Syracuse 1 NY
(1-2-3-4-5-6)
Circle Air Industries Inc 244 Herkimer St Brook-
lyn 16 NY (1-2-4)
Clange Fan Co Kalamazoo Mich (1)
Cool-ette Inc 20080 James Couzens Highway
Detroit 35 Mich (1-2-4)
Coolerator Div McGraw-Edison Co 704 Clark St N
Albion Mich (2-3-6)
Curtis Mfg Co Refrigeration Div 1905 Klenlen
Ave St Louis 20 Mo (1-2-3)
Emerson Electric Mfg Co 8100 Florissant Ave St
Louis 21 Mo (5)
Fedders Corp 58-01 Grand Ave Maspeth NY
(2-4-5)
Forston Co 2117-2119 Juddway (P O Box 10231)
Houston 18 Tex (1-2-5)
Fresh-Aire Div Cory Corp 221 N LaSalle St
Chicago 111 (5)
Frick Co Waynesboro Pa (1)
Frigidaire Div General Motors Corp 300 Taylor St
Dayton 1 Ohio (1-2-4-5)
General Electric Co Air Conditioning Div Comm &
Indus Air Conditioning Dept 5 Lawrence St
Bloomfield NJ (1)
General Electric Co Air Conditioning Div Home
Heating & Cooling Dept Troup Highway Tyler
Tex (2)
General Electric Co Appliance & Television Re-
ceiver Div Room Air Conditioner Dept Appli-
ance Park Louisville 3 Ky (4-5)
Gibson Refrigerator Co 515-615 W Williams St
Greenville Mich (1-2-4-5)
Graybar Electric Co Inc 420 Lexington Ave NY
17 NY (1-2-3-4-5)
Great Northern Mfg Corp 1056 N Wood St
Chicago 22 Ill (2-3)
Hastings Air Conditioning Co Inc 108 S Colorado
Ave Hastings Neb (1-2)
Hoyt Mfg Corp Forge Rd Westport Mass (1)
Ilg Electric Ventilating Co 2850 N Pulaski Rd Chi-
cago 41 Ill (1)
Kauffman Air Conditioning Co 4336 W Pine Blvd
St Louis 13 Mo (1-2-3-4-5)
King Refrigerator Corp 76-02 Woodhaven Blvd
Glendale 27 NY (4-5)
Larco Inc Route 20 East Painesville Ohio (1)
Mitchell Mfg Co 3200 W Peterson Ave Chicago
45 Ill (1-2-4-5)
Mueller Climatrol Div Worthington Corp 2005 W
Oklahoma Ave Milwaukee 1 Wisc (1-2)
Perfection Industries Div Hupp Corp 1135 Ivan-
hoe Rd Cleveland 10 Ohio (2)
Quiet-Heat Mfg Corp 46 Oliver St Newark 5
NJ (1-2-4-5)
Ready-Power Co 11231 Freud Ave Detroit 14
Mich (1-2)
Remington Corp Remington Air Conditioning Div
Willey St Auburn NY (1-2-3-4-5)
Sutton (O A) Corp 1812 W Second Wichita Kans
(1-2-4-5)
Trane Co 2nd & Cameron Ave La Crosse Wis
(1-2-4)
United States Air Conditioning Corp P O Box
360 Delaware Ohio (1-2)
Welbilt Corp 57-18 Flushing Ave Maspeth 78
LI NY (5)
Westinghouse Electric Corp P O Box 868 Pitts-
burgh 30 Pa (1-3-4)
Whirlpool Corp St Joseph Mich (1-2-4-5)
Worthington Corp Worthington Ave Harrison NJ
(1-4)
York Div Bora-Warner Corp Grantley Rd York
Pa (1-2-3-4-5)

11F. AIR HANDLING EQUIPMENT

1. Blowers
2. Circulating fans
3. Exhaust fans, industrial & commercial
4. Exhaust fans, residential
5. Portable fans
6. Residential fans & lighting fixtures combined
7. Range hoods

Equipment used for ventilation, exhaust, or circulation of air. See also "Air Conditioners."

Aerovent Fan Co Inc Ash and Block Sts Piqua
Ohio (1-2-3-5)
Air Controls Inc 2310 Superior Ave Cleveland
14 Ohio (2-3-4-5)
Air-Marine Motors Inc 369 Bay View Ave Amity-
ville NY (1)
Airfan Engineering Co 7401 Telegraph Rd Los
Angeles 22 Calif (1-3)
Allen Cooler & Ventilator Inc 704 Woodward St
Rochester Mich (1-2-3-4)
Alliance Mfg Co Inc Lake Park Blvd Alliance
Ohio (5)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee
1 Wis (1)
Amco Mfg Co 119 Braintree St Boston 34 Mass
(3-4)
American Cooler Corp 3604 Mayflower St (P O
Box 2300) Jacksonville 3 Fla (2-3-4)
American-Standard Industrial Div Detroit 32
Mich (1-3-4)

Ammerman Co Inc P O Box 182 Stillwater Minn
(1-2-3-5)
Arex Co 612 N Michigan Ave Chicago 11 Ill (2-3)
Argo Products Co 1008 N 22 St St Louis 6
Mo (2-3-4-5)
Atlas Mineral Products Co Mertztown Pa (4)
Atlas Tool and Mfg Co 5147 Natural Bridge Ave
St Louis 15 Mo (4-5)
Baldor Electric Co 4353 Duncan Ave St Louis
10 Mo (2-3-4-5)
Bar-Brook Mfg Co Inc 6133-35 Linwood Ave
Shreveport La (2-3-4)
Bertram (Harvey P) Co 2225 Bogan St Cincinnati
Ohio (1-2-3-5)
Berns Air King Corp 3050 N Rockwell St Chi-
cago 111 (4)
Broan Mfg Co Inc Hartford Wis (3-4-6)
Buffalo Forge Co 490 Broadway Buffalo 5 NY
(1-2-3-4)
Burt Mfg Co 936 S High St Akron 11 Ohio
(3-4)
Century Fan & Ventilator Co 45 Cedar St Stam-
ford Conn (1-3)
Chelsea Fan and Blower Co 639 South Ave Plain-
field NJ (1-2-3-4-5)
Chicago Blower Corp 9867 Pacific Ave Franklin
Park Ill (1-2-3)
Circle Air Industries Inc 244 Herkimer St Brook-
lyn 16 NY (1)
Clange Fan Co Kalamazoo Mich (1-2-3)
Commercialaire Corp of America 840 E 98 St
Brooklyn 36 NY (1 thru 5)
Coppus Engineering Corp 344 Park Ave Worcester
10 Mass (1-5)
Dana Fan & Blower Corp 2644 Colerain Ave Cin-
cinnati 14 Ohio (3-4)
Davidson Fan Co 213 California St Newton 58
Mass (3)
Dayton Electric Mfg Co 126 S Oakley Blvd Chi-
cago 12 Ill (1-2-3-4-5)
DeBothezat Fans Div American Machine & Metals
Inc East Moline Ill (2-3-5)
DeVilbiss Co 300 Phillips Ave Toledo 1 Ohio
(3)
Diehl Mfg Co 1187 Findern Ave Somerville
NJ (2-3-4-5)
Dominion Electric Corp 150 Elm St Mansfield
Ohio (3-4-5)
Elliott Co Jeannette Pa (1)
Emerson-Pryne Co 140 N Towne Ave (P O Box
698) Pomona Calif (1-3-4-5)
Folsom Co Inc 3104 Oak Lane Dallas 26 Tex
(2-3-4-5)
Fresh-Aire Div Cory Corp 221 N LaSalle St
Chicago 111 (5)
Frigid Inc 128-168 32nd St Brooklyn 32 NY
(1-2-3-4-5)
Garden City Fan Co 801 N Eighth St Niles Mich
(1-2-3)
General Blower Co 8610 Ferris Ave Morton Grove
Ill (1-2-3)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave
NY 17 NY (1 thru 5)—ADV PG 4-130
Hamilton Fan & Blower Co 2644 Colerain Ave
Cincinnati 14 Ohio (1-2-3-4)
Hartzell Propeller Fan Co S Engle Ave Piqua
Ohio (1-2-3-5)
Heinze Electric Co 685 Lawrence St Lowell
Mass (1)
Hirschman-Pohle Co Inc 300 Lent Ave Le Roy
NY (3)
Hunter Div Robbins & Myers Inc 2500 Frisco Ave
Memphis 14 Tenn (2-3-4-5)
Ilg Electric Ventilating Co 2850 N Pulaski Rd
Chicago 41 Ill (1-2-3-4-5)
Induction Motors Corp 570 Main St Westbury
NY (1)
Industrial Plastic Fabricators Inc Endicott St
Norwood Mass (1-3)
International Oil Burner Co 3800 Park Ave St
Louis 10 Mo (4)
Iona Ventilator Co Inc 2821-29 W Dauphin St
Phila 32 Pa (2-3)
Jeffrey Mfg Co 832 N 4th St Columbus 16 Ohio
(1-3)
Joy Mfg Co H W Oliver Bldg Pittsburgh 22
Pa (1-2-3)
Kisco Co Inc 2414 De Kalb St St Louis 4 Mo
(4-5)
Kord Mfg Co Inc 4510 White Plains Rd New
York 70 NY (2-3-4-5)
Lau Blower Co 2001 Home Ave Dayton 7 Ohio
(1-2-3-4-5)
Lehigh Fan & Blower Div Fuller Co Catasauqua
Pa (3)
Leigh Building Products Coopersville Mich (3)
Markel Electric Products Inc 145 Seneca St Buf-
falo 3 NY (5)
Martin Fan & Blower Co 4634 W 21st Pl Chi-
cago 50 Ill (2-3-4-5)
Marvin Electric Mfg Co 648 Santa Fe Ave Los
Angeles 21 Calif (4)
McLarty Systems 2600 Dickman Rd Battle Creek
Mich (3-5)
McLean Engineering Laboratories 70 Washington
Rd (P O Box 228) Princeton NJ (2-3-4)
Meier Electric and Machine Co Inc 3525 E Wash-
ington St Indianapolis 7 Ind (2-3-4-5)
National Engineering & Mfg Co 16th & Lamine
Sts Sedalia Mo (2-3-4-5)
Norky Mfg Corp P O Box 649 Covington Ky
(3-4)
Northern Blower Co 6434 Barberton Ave Cleveland
2 Ohio (3)
●NUTONE INC Madison & Red Bank Roads Cin-
cinnati 27 Ohio (4-7)—ADV PG 1-2
Peerless Electric Co 1401 W Market St Warren
Ohio (1-2-3-4)

Perfect-Line Mfg Corp Old Country Rd & Railroad
Ave P O Box 65 Hicksville LI NY (3-4)
Phelps Fan Mfg Co 715 Thomas St Little Rock
Ark (2-3-4)
Power Line Fan Co Plainfield NJ (3)
Press Mfg Co Castor Ave & Tulip St Phila 34
Pa (4)
Reed Unit-Fans Inc 501 N St Patrick St New
Orleans La (2-3-4-5)
Reynolds Electric Co 3000 River Rd River Grove
Ill (2-5)
Rich (Phil) Fan Mfg Co Inc 2900 Caroline Hous-
ton 4 Texas (2-3-4-5)
Robbins & Myers Inc 1345 Lagenda Ave Spring-
field Ohio (1-2-3-4)
Roberson Inc 1539 E 103 St Seattle 55 Wash
(3)
Roto-Beam 1755-57 N Keeler Ave Chicago 39
Ill (4)
Shallcross Controls Inc 2217-21 N 31 St Mil-
waukee 8 Wis (1)
Siebring Mfg Co George Iowa (2-3)
Signal Electric Div King-Seely Corp 1800 13th
St Menominee Mich (2-3-4)
Simpson Co 1060 E 11 St Oakland 6 Calif (4)
Skil Corp 5033 Elston Ave Chicago 30 Ill (1)
Stanat Mfg Co Inc 524 Shames Dr Westbury
NY (1)
Standard Electric Mfg Co Inc Haddon Ave West
Berlin NJ (2-3-4)
Sterling Blower Co 791 Windsor St Hartford
Conn (1-3)
Stewart Industries Inc 320 E St Joseph St
Indianapolis 2 Ind (4)
Suton (O A) Corp 1812 W Second Wichita
Kans (2-3-4-5)
Thermador Electrical Mfg Co 5119 District Blvd
Los Angeles 22 Calif (4)
Trade-Wind Motors Inc 7755 Paramount Blvd
Riverside Calif (1-3-4)
Trane Co 2nd & Cameron Ave La Crosse Wis
(3)
United Blower Co Inc 193 Centre St NY 13 NY
(1)
United Electric Motor Co 178 Centre St NY 13
NY (1)
United States Air Conditioning Corp P O Box 360
Delaware Ohio (1)
Valley Fan Mfg Co Box 206 Fort Valley Ga
(2-3-4-5)
Ventrola Mfg Co 501 S Chestnut St Owosso
Mich (4)
●VICTOR VENTILATOR DIV Philip Carey Mfg Co
Middletown Ohio (3-4)—ADV PG 128
Viking Air Products 5601 Walworth Ave Clevel-
and 2 Ohio (1-4)
West Wind Corp 1800 Airport Way Seattle 4
Wash (1-4-5)
Westinghouse Electric Corp P O Box 868 Pitts-
burgh 30 Pa (1-3-4)
Westinghouse Electric Corp Sturtevant Div Damon
St Hyde Park Boston 36 Mass (1-3)
Wind-Way Fan & Ventilator Co 531 St Joseph St
New Orleans 12 La (2-3-4)
Wing (L J) Mfg Co 303 N Stiles St Linden
NJ (1-3)

11G. HUMIDIFIERS & DEHUMIDIFIERS

For control of air moisture content.

Air & Refrigeration Corp 439 Madison Ave New
York City NY
American-Standard Industrial Div Detroit 32
Mich (11G)
Bahnsen Co 1001 S Marshall St Winston-Salem
NC
Berns Air King Corp 3050 N Rockwell St Chi-
cago 111
Carrier Corp Carrier Parkway Syracuse 1 NY
Coolerator Div McGraw-Edison Co 704 Clark St N
Albion Mich (11G)
Damp-Chaser Inc 1440 Ridgewood Blvd Hender-
sonville NC
Dryom : Corp 806 N Fairfax St Alexandria Va
Eboe Mfg Co 265 N Hamilton Rd Columbus 13
Ohio
Fedders Corp 58-01 Grand Ave Maspeth NY
(11-G)
Gibson Refrigerator Co 515-615 W Williams St
Greenville Mich
Haertel (Walter) Co 2840 4th Ave So Minneapolis
Minn
Mitchell Mfg Co 3200 W Peterson Ave Chicago
45 Ill
Mueller Climatrol Div Worthington Corp 2005 W
Oklahoma Ave Milwaukee 1 Wisc
Remington Corp Remington Air Conditioning Div
Willey St Auburn NY
Roberson Inc 1539 E 103 St Seattle 55 Wash
Supreme Electric Products Co 194 Vassar St
Rochester 7 NY
Suttle Equipment Corp 135 S LaSalle St Chi-
cago 3 Ill
Viking Air Products 5601 Walworth Ave Cleveland
2 Ohio
Walton Laboratories Inc 1186 Grove St Irvington
11 NJ
Westinghouse Electric Corp Sturtevant Div Damon
St Hyde Park Boston 36 Mass
Whirlpool Corp St Joseph Mich
Wiss (J) & Sons Co 33 Littleton Ave Newark 7
NJ (8)
Worthington Corp Worthington Ave Harrison NJ

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
11-1	Central Station Air Handling Unit; 12p; Cat. No. 382A (Acme Industries)
11-2	Multi-Zone Central Station Type Air Conditioning Units; 8p (Acme Industries)
11-3	Packaged Air Conditioners; 8p; Cat. No. 570 (Acme Industries)
11-4	Electric Ovens, Furnaces and Related Controls; 198p; Cat. No. 158 (Blue M)
11-5	Ventilating Equipment; 12p; Cat. No. 592 (Broan)
11-6	Pyrex Industrial Radiant Heater Catalog; 14p; Cat. No. PE-60 (Corning)
11-7	Pyrex Radiant Heating Panels; 8p; Cat. No. AP-9 (Corning)
11-8	Ventilating & Exhaust Fans; 16p; Cat. No. DB-37-59 (DeBothezat)
11-9	Radiant Heat; 20p (Fostoria)
11-10	Electric Heat Treating Equipment; Collection of Bulletins (Hayes)
11-11	Motors & Blowers; 16; Cat. No. 6-39 (Heinze)
11-12	Roof Ventilators; 12p (Hirschman-Pohle)
11-13	Induction Heating Equipment; 50p; Cat. No. D2 (Induction Heating)
11-14	Attic and Ventilating Fans; 8p (Perfect-Line)
11-15	Ventilating Range Hoods and Fans; 12p; Cat. No. PV-59 (Progress)
11-16	Electric Heating Design Guide; 33p (Westinghouse)
11-17	Air Source Heat Pump; 12p; (York)

SECTION 12. TOOLS, SUPPLIES & EQUIPMENT

12A. LINEMEN'S TOOLS & ACCESSORIES

1. Climbing equipment
2. Disconnect sticks
3. Hoists, jacks, gins & winches
4. Pike poles and tongs
5. Protective clothing
6. Tamping, digging & trenching hand tools
7. Tool pouches, buckets & accessory bags
8. Tree trimmers & pruners
9. Wire-stringing equipment
10. Hot line tools

Heavy mobile pole line equipment is listed under "Line Trucks & Mobile Equipment" in Section 1.

Adams Engineering Co 31711 Solon Rd Solon Ohio (3)
Bartlett Mfg Co 3003 E Grand Blvd Detroit 2 Mich (8)
Bashlin (W M) Co Bashlin Bldg Grove City Pa (1-7)
Bodendieck Tool Co P O Box 499 Taylorville Ill (2-3-4-8)
Buffalo Machine Mfg Co 586 Tonawanda St Buffalo 7 NY (9)
Chance (A B) Co 210 North Allen St Centralia Mo (2-3-4-6-7-8)
Charleston Rubber Co Stark Industrial Park Charleston SC (5)
Chicago Pneumatic Tool Co 6 E 44 St NY 17 NY (3)
Chisholm-Moore Hoist Div Columbus McKinnon Chain Corp 6072 Fremont Ave Tonawanda NY (3)
Colling Hoist Div Duff-Norton Co Danville Ill (3)
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (3)
David's Gloves Inc 21 W Pleasant St Springfield Ohio (5)
Dicke Tool Co 1201 Warren Ave Downers Grove Ill (4-6-8)
Distribution & High Line Specialties Co 2100 Del Norte St Louis 17 Mo (9)
Dorsey (John E) Co 570 E First St Boston 27 Mass (5)
General Scientific Equipment Co 7516 Limekiln Pike Philadelphia 50 Pa (5-7)
Goodall Rubber Co 493 Whitehead Rd Trenton NJ (5)
Handy Angle Div Lug-All Co 355 Lancaster Ave Haverford Pa (3)
Highway Trailer Co 405 E Fulton St Edgerton Wis (3)
Holan Corp 4100 W 150 St Cleveland 35 Ohio (3-6)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (6-9)
Hunter Tools 9851 Alburtil St Santa Fe Springs Calif (7)
Hykon Mfg Co 163 E State St (P O Box 923 EP) Alliance Ohio (3)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (3-4-6-8-9)
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (2-6-8)
Kellogg Switchboard and Supply Co 79 W Monroe St Chicago 3 Ill (1-7-8-9)
King Mfg Corp 3146 N Chicago Ave Chicago 22 Ill (3)
●KLEIN (MATHIAS) & SONS 7200 McCormick Rd Chicago 45 Ill (1-3-7-9)—ADV PG 161
Kline Sawdust Co Inc 163 N Third St Phila 6 Pa (1-7)
LeTourneau (R G) Inc 2399 S MacArthur Longview Tex (3)

Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (2-6-9)
Mall Tool Co 25000 S Western Ave Park Forest Ill (6)
McCabe-Powers Body Co 5900 N Broadway St Louis 15 Mo (3)
Miller Equipment Co Inc 13th & New Sts Franklin Pa (1-7)
Miller-Robinson Co 7007 Avalon Blvd Los Angeles 3 Calif (8)
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa (1-5-7)
Mitchell Industries Inc Box 17 Municipal Airport Mineral Wells Tex (1)
Robot Industries Inc 7041 Orchard St Dearborn Mich (3)
S & C Electric Co 4435 Ravenswood Ave Chicago 40 Ill (2)
Safety Live Line Tool Co 973 86th Ave Oakland 21 Calif (2-3-4-7-9-10)
Sagen Derrick Co 3101 Grand Ave Chicago Ill (3)
Shaw-Box Crane & Hoist Div Manning Maxwell & Moore Inc Muskegon Mich (3)
Sherman & Reilly Inc 1 Broad St Chattanooga 2 Tenn (3-9)
Silent Hoist & Crane Co 841-63rd St Brooklyn 20 NY (3)
Snyder (M L) & Son Inc 1897 E York St Phila 25 Pa (5)
Southern Electrical Equipment Co 308 West Bland at Mint St Charlotte 3 NC (2)
Surety Rubber Co North High St Carrollton Ohio (5)
Sweet (A L) Iron Works 166 Glenwood Ave Median NY (6)
Templeton Kenly & Co Gardner Rd Broadview Ill (3)
Tulsa Winch Div Vickers Inc 815 E First St Tulsa 20 Okla (3)
Utilities Safety Supply Co Inc Jefferson St & Highway 50 Lee's Summit Mo (1-7)
Utilities Service Co 1 Pine St Allentown Pa (3-4)
Watteredge Co 19629 West Lake Rd Rocky River 16 Ohio (9)
Wilson Rubber Co 1200 Garland Ave S W Canton 6 Ohio (5)

12B. WIRE & CABLE TOOLS & EQUIPMENT

1. Benders, cable & strand
2. Cutting, stripping & splicing tools
3. Wire gages
4. Pulling-in grips, guides, jacks & winches
5. Wire reels, lifts, stands & carts
6. Pressure-conduit tools
7. Staplers
8. Twisters
9. Wire measures
10. Vulcanizing equipment
11. Fish tape, grips, pullers, reels & leaders
12. Wire installation guns

AMP Inc Eisenhower Blvd Harrisburg Pa (2-6)
Adams Engineering Co 31711 Solon Rd Solon Ohio (4-5)
Allen Iron & Steel Co P O Box 550 Norristown Pa (5-9)
Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa (6)
American Pulley Co 4200 Wissahickon Ave Phila 29 Pa (5)
Anthony (P M) Co 773 University Ave Berkeley 10 Calif (2-6)

Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (11)
Ark-Les Switch Corp 51 Water St Watertown Mass (6)
Arrol Corp Foot of Bower St Montgomery Pa (11)
●ARROW FASTENER CO INC 1 Junius St Brooklyn 12 NY (7)—ADV PG 132
Arso Mfg & Sales Corp 451 Tenth Ave New York 18 NY (2)
Artos Engineering Co 2757 S 28 St Milwaukee 46 Wis (2-9)
Associated American Winding Mach Inc 750 St Ann's Ave New York 56 NY (9)
Barth Corp 12650 Brookpark Rd Cleveland 30 Ohio (4-11)
Bashlin (W M) Co Bashlin Bldg Grove City Pa (4)
Black & Decker Mfg Co Towson 4 Md (2)
Bodendieck Tool Co P O Box 499 Taylorville Ill (2)
Buchanan Electrical Products Corp 420 US Route 22 Hillside NJ (2-6)
Burbank Electrical Products 215 W Palm Ave P O Box 7 Burbank Calif (2-11)
Burnby Corp Norwalk Conn (3-6)
Cam-Lok Div Empire Products Inc 9201 Blue Ash Rd (Box 98) Cincinnati 36 Ohio (2-6-10)
Columbia Products Inc Wrightsville Pa (5-9)
●COPE (T J) DIV ROME CABLE CORP Third & Walnut Sts Collegeville 5 Pa (1-4-11)—ADV PG 86-87
Crescent Tool Co 200 Harrison St Jamestown NY (4)
Davis Electric Co 28 Parker St Wallingford Conn (9)
Dicke Tool Co 1201 Warren Ave Downers Grove Ill (4-5)
Distribution & High Line Specialties 2100 Del Norte St Louis 17 Mo (5)
Ericson Mfg Co 5209 Euclid Ave P O Box 1401 Cleveland 3 Ohio (5)
Fargo Mfg Co Inc 845 Main St Poughkeepsie NY (2-4)
●FULLMAN MFG CO 1209-1215 Jefferson St Latrobe Pa (11)—ADV PG 102
General Cement Mfg Co 400 S Wyman St Rockford Ill (2)
General Hardware Mfg Co Inc 80 White St NY 13 NY (2-3)
Gleason Reel Corp 740 N Plankinton Ave Milwaukee 3 Wis (5)
Graybar Electric Co Inc 420 Lexington Ave NY 17 NY (2-4-6)
●GREENLEE TOOL CO 2136 Twelfth St Rockford Ill (4)—ADV PG 112-113
Heller Industrial Fastener Div Heller Roberts Mfg Corp 6115 Carnegie Ave Cleveland 1 Ohio (7)
Highway Trailer Co 405 E Fulton St Edgerton Wis (4)
Holan Corp 4100 W 150 St Cleveland 35 Ohio (4-5)
Holub Industries Inc 442 Elm St Sycamore Ill (2-11)
Husky Products Inc 5300 Vine St Cincinnati 17 Ohio (4)
Hykon Mfg Co 163 E State St (P O Box 923 EP) Alliance Ohio (5-9)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (2-6-11)—ADV PG 67-68-69-70
Interstate Drape Forge Co Special Products Div 4051 N 27 St Milwaukee 16 Wis (2)
Jerrold Electronics Corp 23rd & Chestnut Sts Phila 3 Pa (2-6)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (6)
Jet Line Gun Co 730 Seigle Ave Charlotte NC (12)

Joy Mfg Co Electrical Products Div 1201
(1) Mackland Ave St Louis 10 Mo (10)
Kearney (James R) Corp 4236 Clayton Ave St
Louis 10 Mo (6)
Kellens Co Inc 15 Williams St Stonington
Conn (4)
Kellogg Switchboard and Supply Co 79 W Monroe
St Chicago 3 Ill (2-4)
King Mfg Corp 3146 N Chicago Ave Chicago 22
Ill (4)
Klein (Mathias) & Sons 7200 McCormick Rd
Chicago 45 Ill (2-4-8-11)
LaRaus Mfg Co Inc LeRoy NY (5)
Lew Electric Fittings Co 627 W Lake St Chicago
6 Ill (11)
Line Material Industries McGraw-Edison Co 700
W Michigan St Milwaukee Wis (1-4)
●LINT (CLYDE W) 2323 W 18 St Chicago 8 Ill
(9-11)—ADV PG 159
Madison Equipment Co 5405 Detroit Ave Cleve-
land 2 Ohio (2-5-9-11)
Martindale Electric Co 1383 Hird Ave Cleve-
land 7 Ohio (2)
Marvel Rack Mfg Co Inc 24 N First St Min-
neapolis 1 Minn (9)
Miller Electric Mfg Co Inc 718 S Bounds St
Appleton Wisc (13)
Miller Equipment Co Inc 13th & New Sts
Franklin Pa (2)
Milwaukee Parts Corp 607-15 S Sixth St Milwau-
kee 4 Wis (2)
Mine Safety Appliances Co 201 N Braddock Ave
Pittsburgh 8 Pa (2)
Minneapolis Electric & Construction Co 80
S 12 St Minneapolis 3 Minn (9)
Olympic Instruments Inc Vashon Wash (5-9)
Potter & Rayfield Inc P O Box 1042 Atlanta
Ga (2)
Rattan Mfg Co 10 Wall St (P O Box 1745)
New Haven 7 Conn (11)
Richards (J R) Co P O Box 482 Carnegie Pa (11)
Roll-A-Reel Co 4630 Reading Rd Cincinnati 29
Ohio (5)
Rush Wire Stripper Div Eraser Co Inc 1068 S
Clinton St Syracuse 4 NY (2-8)
Sherman (H B) Mfg Co 22 Barney Battle Creek
Mich (4-5-6)
Snap-on-Tools Corp 8028 28th Ave Kenosha Wis
(2)
Speedex Mfg Co 418 S Wyman St Rockford Ill
(2)
Starrett (L S) Co Athol Mass (3)
Steel City Electric Co 1207 Columbus Ave Pitts-
burgh 33 Pa (11)
Steel Electric Products Co Inc 5602 18th Ave
Brooklyn 4 NY (11)
Suttle Equipment Corp 135 S LaSalle St Chicago
3 Ill (5)
Swett (A L) Iron Works 166 Glenwood Ave Medina
NY (5)
Templeton Kenly & Co Gardner Rd Broadview Ill
(4)
Thomas & Betts Co 36 Butler St Elizabeth 1
NJ (2-6-11)
Thomas Instrument Co Box 41 Liverpool Rd
Phoenix NY (2)
Tomic Sales & Engineering Co 20000 Sherwood
Ave Detroit 34 Mich (2)
Triton Mfg Co Inc East Haddam Conn (2)
Utica Drop Forge & Tool Div Kelsey-Hayes Co
Utica 4 NY (2)
Vaco Products Co 317 E Ontario St Chicago 11
Ill (6)
Waldman (John J) Co 477 Atlantic Ave Brooklyn
17 NY (9)
Whitaker Reel Mfg Co 3704 Jackson St (P O
Box 1318) Monroe La (5)
Wiss (J) & Sons Co 33 Littleton Ave Newark 7
NJ (2)
Woodhead (Daniel) Co 15 N Jefferson St Chicago
6 Ill (5)
Yorkville Metal Products Co 677 Broadway NY
12 NY (2)

12C. RACEWAY TOOLS & EQUIPMENT

1. Benders & hickey, conduit & EMT
2. Cutters & indenters, conduit & EMT
3. Conduit tool pickups & grapples
4. Knockout punches
5. Conduit measurers
6. Pipe pushers
7. Mandrels
8. Reamers
9. Threaders, stocks & dies
10. Pipe vices, stands & holders
11. Conduit racks
12. Bending gauges
13. Bending and pushing pumps
14. Bending and pushing power drives

Allen Iron & Steel Co P O Box 550 Norristown
Pa (11)
American Pipe Bending Machine Co Inc Poultny
Vt (1)
American Pipe Tool Co 4856 W Kinzie St Chi-
cago 44 Ill (8-9-10)
Appleton Electric Co 1701-59 Wellington Ave
Chicago 13 Ill (1)
Armstrong Bros Tool Co 5200 W Armstrong Ave
Chicago 30 Ill (9-10)

Arrol Corp Foot of Bower St Montgomery Pa
(1)
Athol Machine & Foundry Co 82 South St Athol
Mass (10)
Beaver Pipe Tools Inc 310 Dana Ave N E Warren
Ohio (2-9)
Blackhawk Mfg Co 5325 W Rogers Milwaukee 46
Wis (1-4)
●BRIEGEL METHOD TOOL CO 104 N E First St
Galva Ill (2-10)—ADV PG 89
C & B Engineering and Fabricating Corp P O Box
8701 Houston Tex (1-5)
Chamorr Mfg Corp 43-63 11th St Long Island
City 1 NY (1)
Collins Machinery Corp 5474 Alhambra Ave Los
Angeles 32 Calif (2-9)
Cope (T J) Div Rome Cable Corp Third & Walnut
Sts Collegeville 5 Pa (3)
Duro Fittings Co 2210 S Davie Ave Los An-
geles 22 Calif (1)
Engineering Associates 6547 West Blvd Inglewood
Ore (1)
Erie Tool Works 12th & Liberty Sts Erie Pa
(2-9-10)
Gardner Bender Co 5448 N 24 Pl Milwaukee 9
Wis (1)
Gedney Electric Co Americas Bldg Radio City
NY 20 NY (1)
General Hardware Mfg Co Inc 80 White St NY
13 NY (8)
●GREENLEE TOOL CO 2136 Twelfth St Rockford
Ill (1-4-6-13)—ADV PG 112-113
Hein-Werner Corp 1200 National Ave Waukesha
Wisc (1)
Henderson Electric Co Ampere Station East
Orange NJ (1)
Hill (Walter P) Inc 22183 Telegraph Rd Detroit
19 Mich (1)
Holub Industries Inc 442 Elm St Sycamore Ill
(8)
Hossfeld Mfg Co 460 W Third St Winona Minn
(1)
Lew Electric Fittings Co 627 W Lake St Chi-
cago 6 Ill (1)
●LIDSEEN OF NORTH CAROLINA INC 1000 First
St Hayesville NC (1)—ADV PG 142
●LINT (CLYDE W) 2323 W 18 St Chicago 8 Ill
(1-4-10)—ADV PG 159
Madison Equipment Co 5405 Detroit Ave Cleve-
land 2 Ohio (1)
Martin (H P) & Sons 801 W 12 St P O Box 475
Owensboro Ky (1-10)
Mercury Hydraulics Inc 1632 Wazee St Denver 2
Colo (6)
Midwest Electric Mfg Co 1639 Walnut St Chicago
12 Ill (1)
Muncie Gear Works Inc P O Box 433 Cordele
Ga (9)
National Electric Div H K Porter Co Inc Porter
Bldg Pittsburgh 19 Pa (1)
Nye Tool Co 4120-30 Fullerton Ave Chicago 32
Ill (4-9)
Oster Mfg Co 1340 E 289 St Wickliffe Ohio
(8-9-10)
Ovliatt (D C) Co 2174 Lakeside Ave Cleveland
14 Ohio (2-8-9)
Rattan Mfg Co 10 Wall St (P O Box 1745)
New Haven 7 Conn (1)
Republic Steel Corp Steel And Tubes Div 224 E
131 St Cleveland 8 Ohio (1-7)
Richards (J R) Co P O Box 482 Carnegie Pa
(1)
Ridge Tool Co 400 Clark St Elyria Ohio (2-8-
9-10)
Salem Tool Co 767 S Ellsworth Ave Salem Ohio
(6)
●SILVEY PIPE BENDER CO 2215 Brighton Ave
Kansas City 27 Mo (1)—ADV PG 166
Spring Load Mfg Corp 6332 Maynard Ave Seattle
Wash (2)
Steel City Electric Co 1207 Columbus Ave Pitts-
burgh 33 Pa (1)
Steel Electric Products Co Inc 5602 18th Ave
Brooklyn 4 NY (1)
Steelduct Co Republic Steel Bldg Youngstown
Ohio (1)
Templeton Kenly & Co Gardner Rd Broadview
Ill (6)
Thepitt Mfg Co Gregg & Hammond Sts Carnegie
Pa (1)
Thomas & Betts Co 36 Butler St Elizabeth 1
NJ (1)
●TOLEDO PIPE THREADING MACHINE CO 1445
Summit St Toledo 4 Ohio (2-8-9-10)—ADV
PG 132
Velocity Power Tool Co 201 N Braddock Ave
Pittsburgh 8 Pa (9)
Wachs (E H) Co 1525 N Dayton St Chicago 22
Ill (2)
Wagner Malleable Products Co 222 W Adams St
Chicago 6 Ill (2)
●WELLS MFG CORP 250 Service Rd Three Rivers
Mich (2)—ADV PG 167
Wheeler Mfg Co Ross Rd Ashtabula Ohio (2)

12D. MATERIALS HANDLING EQUIPMENT

1. Ladders
2. Scaffolds, work towers & platforms
3. Hoists
4. Lift trucks

5. Maintenance trucks
6. Hand trucks
7. Truck bodies & b'ns
8. Bins, cabinets, shelving & framing angle
9. Office & workshop trailers
10. Jacks & jack screws
11. Tool chests

Allen Iron & Steel Co P O Box 550 Norristown
Pa (2-6-8)
Allied Mfg & Sales Co 3101 W Grand Ave
Chicago 22 Ill (1-2-3-4-5-6)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee
6 Wis (4)
American Engineering Co Wheatshaf Lane &
Sepviva St Philadelphia 37 Pa (3)
American Pulley Co 4200 Wissahickon Ave Phila
29 Pa (4-5-6-9)
Automatic Transportation Co 101 W 87th St
Chicago 20 Ill (4-6)
Baker-Ross Inc 602 W McCarty St Indianapolis
6 Ind (2)
Baltimore Co Lincoln & Garfield Aves West Chester
Pa (1-2)
Beaver-Advance Corp 12th & Factory Sts Ellwood
City Pa (2)
Bernard-Franklin Co Inc Hedley & Baifour Sts
Phila 37 Pa (6-8)
●BRUHN STEEL PRODUCTS CO Dunes Highway
(P O Box 567) Chesterton Indiana (11)—ADV
PG 142
Building Service Co 4923 18th Ave S Minneapolis
17 Minn (2)
Chester Hoist Div National Screw & Mfg Co
Lisbon Ohio (3)
Chicago Pneumatic Tool Co 6 E 44 St NY 17
NY (3)
Chisholm-Moore Hoist Div Columbus McKinnon Chain
Corp 6072 Fremont Ave Tonawanda NY (3)
Clark (George P) Div Cragin & Wilkins Co Inc
Fitchburg Mass (4-6)
Coffing Hoist Div Duff-Norton Co Danville Ill
(3)
CraneVeyor Corp 1240 S Boyle Ave Los Angeles
23 Calif (3)
Dayton Safety Ladder Co 2337 Gilbert Ave Cin-
cinnati 6 Ohio (1)
Detroit Hoist & Machine Co 8292 Morrow St
Detroit 11 Mich (3)
Economy Engineering Co 4511 West Lake St
Chicago 24 Ill (1 thru 5)
Ederer Engineering Co 2943 1st Ave S Seattle
4 Wash (3)
Elcor Div F L Jacobs Co 4235 W North Ave
Chicago 39 Ill (1-2-5)
Electro Lift Inc 204 Sargeant Ave Clifton NJ
(3)
Elwell-Parker Electric Co 4319 St Clair Ave
Cleveland 3 Ohio (4)
Erickson Power Lift Trucks Inc St Anthony Blvd
& University Ave NE Minneapolis 18 Minn (4)
F W D Corp 105 E 12 St Clintonville Wisc (5)
Fairbanks Co 393 Lafayette St NY 3 NY (6)
Flex Angle Corp 3760 Oakwood Ave (P O Box
418) Youngstown 1 Ohio (8)
Frick-Gallagher Mfg Co 110 S Michigan Ave
Wellston Ohio (8)
Goshen Churn & Ladder Inc Goshen Ind (1-2)
Haerfel (Walter) Co 2840 4th Ave So Minneapolis
Minn (8)
Hamilton Caster & Mfg Co 1519 Dixie Highway
Hamilton Ohio (5-6-7-9)
Handy Angle Div Lug-All Co 355 Lancaster Ave
Haverford Pa (3)
Harnischfeger Corp 4400 W National Ave Mil-
waukee 46 Wis (3)
Holan Corp 4100 W 150 St Cleveland 35
Ohio (1-7)
Hyster Co 2902 N E Clackamas St Portland 8
Ore (4)
Ingersoll-Rand Co 11 Broadway NY 4 NY (3)
Inland Ladder Co 1914 Stanford St Alameda
Calif (1)
International Trailer Co Inc 725 North Point Rd
Baltimore 6 Md (9)
King Mfg Corp 3146 N Chicago Ave Chicago 22
Ill (3)
Lantz Mfg Co Inc Valparaiso Ind (3)
Leebaw Mfg Co 65 Wayne Ave Youngstown 2
Ohio (5-6)
LeTourneau (R G) Inc 2399 S Mac-Arthur Longview
Tex (3)
Lift Trucks Inc 2425 Spring Grove Ave Cin-
cinnati 14 Ohio (4-6)
Link-Belt Co Prudential Plaza Chicago 1 Ill
(3-4-5-6-8-9)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill
(1)
Manning Maxwell & Moore Inc 250 E Main St
Stratford Conn (3)
Massey-Ferguson Industrial Div Massey-Ferguson
Inc 1009 S West St Wichita 13N Kans (4)
McCabe-Powers Body Co 5900 N Broadway St
Louis 15 Mo (1-3-5-7)
Mercury Mfg Co 4700 W Division St Chicago
Ill (4-6)
Moto-Truc Co 1953 E 59 St Cleveland 3
Ohio (4)
Nutting Truck and Caster Co 1201 W Division
St Faribault Minn (6)
O'Neil-Irwin Mfg Co 427 Eighth Ave Lake
City Minn (6)
Patent Scaffolding Co Inc 38-21 12th St LIC
1 NY (1-2)
Penco Div Alan Wood Steel Co 200 Brower Ave
Oaks Pa (8)

Peters Co IM Div Portland Ore (2)
 Pucel Enterprises Inc 3746 Kelley Ave Cleveland
 14 Ohio (6-8)
 Reading Crane & Hoist Corp 2100 Adams St
 Reading Pa (3)
 Revolver Co 2000 86th St North Bergen
 NJ (12-D)
 Robbins & Myers Inc 1345 Lagonda Ave Spring-
 field Ohio (3)
 Rol-Away Truck Mfg Co Inc 6143 S E Foster Rd
 Portland 6 Ore (1-5)
 Round (David) & Son Inc Box 883 Cleveland
 22 Ohio (3)
 Safway Steel Products Inc 6234 W State St
 Milwaukee 13 Wis (2-3)
 Sasgen Derrick Co 3101 Grand Ave Chicago
 Ill
 Scranton Aluminum Mfg Co 419 S Wyoming
 Ave Scranton Pa (1)
 Self-Lifting Piano Truck Co 423 N Main St
 Findlay Ohio (3-6)
 Shaw-Box Crane & Hoist Div Manning Maxwell
 & Moore Inc Muskegon Mich (3)
 Shure Mfg Corp 1601 S Hanley Rd St Louis
 Mo (8)
 Silent Hoist & Crane Co 841-63rd St Brooklyn
 20 NY (3-4)
 South River Metal Products Co Inc 377 Turnpike
 South River NJ (1)
 Stevens Appliance Truck Co Norton Rd (P O
 Box 897) Augusta Ga (6)
 Sweet (A L) Iron Works 166 Glenwood Ave Medina
 NY (10)
 Thor Corp 2115 S 54 Ave Chicago 50 Ill (3-10)
 Up-Right Inc Up-Right Scaffolds Div 1013 Pardee
 St Berkeley 10 Calif (1-2)
 Utility Body Co 1530 Wood St Oakland 7 Calif
 (7)
 Waco Mfg Co 3565 Wooddale Ave Minneapolis
 16 Minn (2)
 Wellington Machine Co 133 De Wolf St Wellington
 Ohio (1)
 Wright Hoist Div American Chain & Cable Co Inc
 Franklin & Hay Sts York Pa (3)
 Yale & Towne Mfg Co 11000 Roosevelt Blvd Phila-
 delphia 15 Pa (2-3-4-5-6)
 Yeats Appliance Dolly Sales Co 2124 N 12th St
 Milwaukee 5 Wis (6)

12E. ARMATURE & STATOR TOOLS & EQUIP- MENT

1. Air gap gauges
2. Dynamic balancers
3. Static balancers
4. Holders & stands
5. Banders
6. Brush seaters
7. Commutator grinding, cutting, scraping
& filing equipment
8. Wedge levelers
9. Bushing reamers
10. Brush tension scales

Allen Electric and Equipment Co 2101-2117 N
 Pitcher St Kalamazoo Mich (7)
 Annis (R B) Co 1101 N Delaware St Indianapolis
 2 Ind (2)
 Associated American Winding Mach Inc 750 St
 Ann's Ave New York 56 NY (5)
 Balance Engineering Co 5030 W Lake St Chicago
 44 Ill (2-3)
 Co-operative Utilities Co Inc 4637-39 Mulberry
 St Phila 24 Pa (6-7)
 Delta-Star Electric Div H K Porter Co Inc 2437
 Fulton St Chicago 12 Ill (4-5-7)
 DeWalt Div American Machine & Foundry Co
 Fountain Ave Lancaster Pa (7)
 Foredom Electric Co Inc Bethel Conn (7)
 General Electric Co Apparatus Sales Div Sche-
 nectady 5 NY (2)
 Gisholt Machine Co 1245 E Washington Ave Madi-
 son 10 Wis (2)
 Heller Tool Co Heller Drive Newcomerstown Ohio
 (7)
 Holub Industries Inc 442 Elm St Sycamore Ill
 (6-7)
 Hulthorst Tools Inc 1915 Nebraska Ave Toledo 7
 Ohio (7)
 Ideal Industries Inc 5136 Park Ave Sycamore
 Ill (6-7)
 Martindale Electric Co 1383 Hird Ave Cleveland
 7 Ohio (1-6-7-8-9-10)
 Potter & Rayfield Inc P O Box 1042 Atlanta
 Ga (4-5)
 Raydine Corp 2715 S Fourth St (P O Box 1147)
 Springfield Ill (2)
 Sittler Corp 18 N Ada St Chicago 7 Ill (6-7)
 Snap-on-Tools Corp 8028 28th Ave Kenosha Wis
 (7)
 Simonds Saw and Steel Co 470 Main St Fitch-
 burg Mass (7)
 Vibrascope Co P O Box 97 Glenford NY (2)
 Waveland Electric Co 5542 N Ashland Ave Chi-
 cago 40 Ill (6-7)
 Westinghouse Electric Corp P O Box 868 Pitts-
 burgh 30 Pa (2)
 Wyzenbeek & Staff Inc 223 N California Ave Chi-
 cago 12 Ill (7)

12F. COIL TOOLS & EQUIPMENT

1. Checks
2. Heads
3. Impregnators
4. Lacing hooks
5. Spreaders
6. Tampers
7. Winders & tapers
8. Forms

Armature Coil Equipment Inc 2605 Vega Ave
 Cleveland 13 Ohio (5-7-8)
 Associated American Winding Mach Inc 750 St
 Ann's Ave New York 56 NY (7-8)
 Chapman (P E) Electrical Works Inc 1820 Chou-
 teau Ave St Louis 3 Mo (7)
 Continental Electric Co 1234 S Prairie Ave
 (P O Box 895) Hawthorne Calif (2)
 Crown Industrial Products Co 713 Amsterdam St
 Woodstock Ill (6-7)
 Dage Television Div Thompson Products Inc
 Michigan City Ind (5)
 Davis Electric Co 28 Parker St Wallingford
 Conn (7)
 Delta-Star Electric Div H K Porter Co Inc 2437
 Fulton St Chicago 12 Ill (2-5-7)
 Electro Devices Co Inc 580 Main St Wilmington
 Mass (7)
 Harder (Donald C) Co 3710 Midway Dr San
 Diego 10 Calif (7)
 Martindale Electric Co 1383 Hird Ave Cleveland
 7 Ohio (1-6-7)
 Potter & Rayfield Inc P O Box 1042 Atlanta
 Ga (2-3-7-8)
 Stokes (F J) Corp 5500 Tabor Rd Philadelphia
 20 Pa (3)
 Universal Winding Co P O Box 1605 Providence
 1 RI (7)
 Waldman (John J) Co 477 Atlantic Ave Brook-
 lyn 17 NY (7)

12G. INSULATION TOOLS

1. Cutters
2. Edgers, folders, formers & turners
3. Wedge drivers & removers

Billings & Spencer Co 1 Laurel St Hartford 1
 Conn (1)
 Crown Industrial Products Co 713 Amsterdam St
 Woodstock Ill (2)
 Delta-Star Electric Div H K Porter Co Inc 2437
 Fulton St Chicago 12 Ill (1)
 Klein (Mathias) & Sons 7200 McCormick Rd Chi-
 cago 45 Ill (1)
 Martindale Electric Co 1383 Hird Ave Cleveland
 7 Ohio (1-2-3)
 Safety Live Line Tool Co 973 86th Ave Oakland
 21 Calif (1)

12H. SOLDERING TOOLS & EQUIPMENT

1. Guns, irons & machines
2. Stands & holders
3. Heaters
4. Pans
5. Torches

Acoustica Associates Inc 26 Windsor Ave Mineola
 NY (1)
 Alcar Instruments Inc 17 Industrial Ave Little
 Ferry NJ (1)
 American Electrical Heater Co 6110 Cass Ave
 Detroit 2 Mich (1-2)
 Bernz (Otto) Co Inc Driving Park & Ramona Roch-
 ester 13 NY (5)
 Chapman (P E) Electrical Works Inc 1820 Chou-
 teau Ave St Louis 3 Mo (1)
 Clements Mfg Co 6650 S Narragansett Ave Chi-
 cago 38 Ill (5)
 Dockson Corp 3839 Wabash Ave Detroit 8 Mich
 (5)
 Electric Materials Co Box 390 North East Pa
 (1)
 Electric Soldering Iron Co Inc West Elm St Deep
 River Conn (1-4)
 General Electric Co Apparatus Sales Div Sche-
 nectady 5 NY (1-4)
 Good-All Electric Mfg Co 112 W First St
 Oquallia Neb (1)
 Ideal Industries Inc 5136 Park Ave Sycamore
 Ill (1)
 Insto-Gas Corp 998 E Woodbridge St Detroit 7
 Mich (1-3-5)
 Kwikheat Mfg Co 3732 San Fernando Rd Glen-
 dale 4 Calif (1-2)
 Lenk Mfg Co Franklin Ky (1-5)
 Luma Electric Equipment Co 1607 Coaling Drive
 (P O Box 132) Toledo Ohio (1)
 Lyon Rural Electric Co 2075 Moore St San Diego
 12 Calif (4)
 Mitchell Industries Inc Box 17 Municipal Airport
 Mineral Wells Tex (1)
 National Specialties Co Inc 1902 Howell St Ft
 Wayne 7 Ind (1)
 Newage Industries Inc 222 York Rd Jenkintown
 Pa (1)

Prepo Corp Edgerton Wis (5)
 Smith Welding Equipment Corp 2633 4th St
 SE Minneapolis 14 Minn (1-5)
 Snap-on-Tools Corp 8028 28th Ave Kenosha
 Wis (1)
 Sta-Warm Electric Co 53 N Chestnut St Ravenna
 Ohio (3-4)
 Triton Mfg Co Inc East Haddam Conn (1)
 Turner Brass Works 821 Park Ave Sycamore
 Ill (4-5)
 Ungar Electric Tools Inc 4101 Redwood Ave Los
 Angeles 66 Calif (1-3)
 Velocity Power Tool Co 201 N Braddock Ave
 Pittsburgh 8 Pa (5)
 Vulcan Electric Co 88 Holten St Danvers Mass
 (1-2-3-4)
 Waage Electric Inc 720 Colfax Ave Kenilworth
 NJ (4)
 Wall (P J) Mfg Co P O Box 71 Grove City Pa
 (1-2-3)
 Weiler Electric Corp 601 Stone's Crossing Rd
 Easton Pa (1)
 Wen Products Inc 5808 Northwest Highway
 Chicago 31 Ill (1)
 Wilder Mfg Co Inc Mechanic St & Erie Railroad
 Port Jervis NY (2)

12J. MISCELLANEOUS SHOP MACHINERY & EQUIPMENT

1. Arbor presses
2. Metal benders
3. Metalizers
4. Demagnetizers
5. Platers
6. Etchers & engravers
7. Sprayers
8. Gear & bearing installers & extractors
9. Melting pots, tanks & kettles
10. Electric welders & accessories
11. Vacuum cleaners & portable blowers
12. Lamp disposal units
13. Magnetizers

Acme Electric Heating Co 1217 Washington
 St Boston 18 Mass (9)
 Acro Welder Mfg Co 1719 W St Paul Ave Milwau-
 kee 3 Wis (10)
 Acromark Co 320 Morrell St Elizabeth 4 NJ
 (6)
 Aeroil Products Co Inc 69 Wesley St South
 Hackensack NJ (9)
 Alcar Instruments Inc 17 Industrial Ave Little
 Ferry NJ (9)
 American Floor Machine Co 518 S St Clair St
 Toledo 3 Ohio (11)
 American Pipe Tool Co 4856 W Kinzie St Chicago
 44 Ill (9)
 American Vacuum Co 8100 N Ridgeway Skokie Ill
 (11)
 Anderson (Albert & JM) Mfg Co 289 A St Bostor.
 10 Mass (2)
 Annis (R B) Co 1101 N Delaware St Indianap-
 olis 2 Ind (4-6-13)
 Armstrong-Bray & Co 5366 Northwest Highway
 Chicago 30 Ill (8)
 Auto Arc-Weld Mfg Co 9615 Meech Ave Cleve-
 land 5 Ohio (10)
 Birdsell Mfg Co Inc 750 San Antonio Rd Palo
 Alto Calif (10)
 Black & Decker Mfg Co Towson 4 Md (9-11)
 Blackhawk Mfg Co 5325 W Rogers, Milwaukee
 46 Wis (8)
 Breuer Electric Mfg Co 5100 N Ravenswood Ave
 Chicago 40 Ill (11)
 Burgess Vibrocrafters Grayslake Ill (6)
 Caltron Products Co 3518 W Pico Blvd Los
 Angeles 19 Calif (13)
 Chadrey Corp P O Box 1858 Hartford 1 Conn
 (12)
 Clements Mfg Co 6650 S Narragansett Ave
 Chicago 38 Ill (11)
 Cool-Amp Co 8603 W 17 Ave Portland 19 Ore
 (5)
 Cooper (DC) Co 1467 S Michigan Ave Chicago
 5 Ill (9)
 Cope (T J) Div Rome Cable Corp Third & Walnut
 Sts Collegeville 5 Pa (9)
 Coppus Engineering Corp 344 Park Ave Worces-
 ter 10 Mass (11)
 Crane-Puiler Co Waltham 54 Mass (8)
 Crown Industrial Products Co 713 Amsterdam St
 Woodstock Ill (6)
 Crozier Machine Tool Co 684 N Prairie Ave
 Hawthorne Calif (8)
 Dake Corp 724 Robbins Rd Grand Haven Mich
 (1)
 DeVilbiss Co 300 Phillips Ave Toledo 1 Ohio
 (7)
 Dickey-Grabler Co 10302 Madison Ave Cleveland
 2 Ohio (6)
 Doyle Vacuum Cleaner Co 234 Stevens St SW
 Grand Rapids Mich (11)
 Eisler Engineering Co Inc 750 S 13 St Newark
 3 NJ (10)
 Electric Arc Inc 152 Jelliff Ave Newark 8 NJ
 (10)
 Electric Arc Sales Co P O Box 587 Ypsilanti
 Mich (4-6-13)
 Electro Engineering Products Co Inc 609 W
 Lake St Chicago 6 Ill (7)

Erie Tool Works 12th & Liberty Sts Erie Pa (9)
 Ewald Instruments Box 124P Kent Conn (10)
 Federal Machine & Welder Co 1745 Overland Ave NE Warren Ohio (10)
 General Electric Co Apparatus Sales Div Schenectady 5 NY (9)
 Graham Mfg Corp 152 Second Ave Needham Hts 94 Mass (10)
 Gayan Machinery Co Inc Box 150 Logan W Va (10)
 Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (10)
 Hesse Products Co 600 W Seventh St Reno Nev (5)
 Hobart Bros Hobart Square Troy 1 Ohio (10)
 Holub Industries Inc 442 Elm St Sycamore Ill (11)
 Hossfeld Mfg Co 460 W Third St Winona Minn (2)
 Ideal Industries Inc 5136 Park Ave Sycamore Ill (4-6-11)
 Insto-Gas Corp 998 E Woodbridge St Detroit 7 Mich (9)
 Invincible Vacuum Cleaner Mfg Co Dover Ohio (11)
 Kent Co Inc 359 Canal St Rome NY (11)
 Klein (Leo) Electronics 2404 S LaBrea Ave Los Angeles 16 Calif (4-13)
 Ladbury Co Inc Boston Post Rd (PO Box 88) Branford Conn (12)
 Lee (K O) Co Congress at First Ave SE Aberdeen S Dak (10)
 Lenco Inc 350 W Adams St Jackson Mo (10)
 Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio (10)
 Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (2)
 Luma Electric Equipment Co 1607 Coining Drive (PO Box 132) Toledo Ohio (4-6)
 Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (4-6-8-11)
 Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass (6)
 Mid-States Welder Mfg Co 6025 S Ashland Ave Chicago 36 Ill (10)
 Miller Electric Mfg Co Inc 718 S Bounds St Appleton Wisc (10)
 Morrow Co 400 W Madison St Chicago 6 Ill (11)
 Multi-Clean Products Inc 2277 Ford Parkway St Paul 16 Minn (11)
 National Electric Welding Machines Co 1846-1916 N Trumbull St Bay City Mich (10)
 National Super Service Co 1946 N 13 St Toledo Ohio (11)
 New England Carbide Tool Co Inc 55 Commercial St Medford 55 Mass (2)
 Newage Industries Inc 222 York Rd Jenkintown Pa (6)
 O'Neil-Inwin Mfg Co 427 Eighth Ave Lake City Minn (12)
 Owatonna Tool Co 374 N Cedar St Owatonna Minn (1-8)
 Peck Stew & Wilcox Co 274 Center St Southington Conn (2)
 Pedrick Tool & Machine Co 3640 N Lawrence St Phila 40 Pa (2)
 Peer Inc 1220 Milton St Benton Harbor Mich (10)
 Pines Engineering Co Inc 601 Walnut St Aurora Ill (2)
 Potter & Rayfield Inc P O Box 1042 Atlanta Ga (2)
 Precision Welder Mfg Co 2218 W Lake St Chicago 12 Ill (10)
 Pullman Vacuum Cleaner Corp 25 Buick St Boston 15 Mass (11)
 Radio Frequency Laboratories Inc Boonton NJ (4-13)
 ●RAPID ELECTROPLATING PROCESS INC 1414 S Wabash Ave Chicago 5 Ill. (5)—ADV PG 162
 Rawplug Co Inc 212 Petersville Rd New Rochelle NY (5)
 Raytheon Mfg Co Commercial Equipment Div 100 River St Waltham 54 Mass (10)
 Rex Welder Co 1200 Milton St Benton Harbor Mich (10)
 Sclaky Bros Inc 4915 W 67 St Chicago 38 Ill (10)
 Scientific Electric Inc 105-109 Monroe St Garfield NJ (10)
 Shrader (FW) Co 11623 S Broadway Los Angeles 61 Calif (4-13)
 Smith Welding Equipment Corp 2633 4th St S E Minneapolis 14 Minn (10)
 Snap-on-Tools Corp 8028 28th Ave Kenosha Wis (1-8)
 Spencer Turbine Co 486 New Park Ave Hartford 6 Conn (11)
 Sta-Warm Electric Co 53 N Chestnut St Ravenna Ohio (9)
 Stokes (FJ) Corp 5500 Tabor Rd Philadelphia 20 Pa (3)
 Sweet (A L) Iron Works 166 Glenwood Ave Medina NY (9)
 Taylor-Winfield Corp 1052 Mahoning Ave Warren Ohio (10)
 Trindl Products Ltd 1807-11 S Clark St Chicago 16 Ill (10)
 Truco Masonry Drilling Div Wheel Trueing Tool Co 3200-3220 W Davison Ave Detroit 38 Mich (11)
 Turner Brass Works 821 Park Ave Sycamore Ill (9)
 Universal Electric Sales Corp 3537 Lee Rd Cleveland 20 Ohio (10)
 Versabar Corp 14 Whyte St Jersey City NJ (10)
 Vulcan Electric Co 88 Holten St Danvers Mass (9)

Waage Electric Inc 720 Colfax Ave Kenilworth NJ (9)
 Walco Electric Co 131 Blackstone St Providence 1 RI (8)
 Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (9)

12K. FASTENING DEVICES

1. Bolt-sealing & screw-anchoring compound
 2. Expansion bolts, shields & anchors
 3. Concrete inserts
 4. Toggle bolts
 5. Powder-actuated fastening tools
 6. Hammer-actuated fastening tools
- Ackerman-Johnson Co 625 W Jackson Blvd Chicago 6 Ill (2-3-4)
 American Sealants Co Hartford 6 Conn (1)
 Apex Bolt Products Co 452-458 No Claremont Ave Chicago 12 Ill (2-4)
 ●ARRO EXPANSION BOLT CO P O Box 388 Marion Ohio (2-4)—ADV PG 132-148
 Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (3)
 ●DIAMOND EXPANSION BOLT CO INC Garwood NJ (2-4)—ADV PG 152
 Equipment Corp of America 1537 Superior Ave Cleveland 14 Ohio (2-5)
 Fastway Fasteners Inc 1676 E 28 St Lorain Ohio (5)
 Gateway Engineering Co 3233 W Grand Ave Chicago 51 Ill (3)
 Hilti Rapid Fastening Systems Inc 73 Southfield Ave Stamford Conn (2-5)
 Holub Industries Inc 442 Elm St Sycamore Ill (2-3-4)
 Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (2)
 International Seal & Knot Protector Co 58-02 37th Ave Woodside 77 NY (6)
 Leibfried (C H) Mfg Corp 95-101 Guernsey St Brooklyn 22 NY (3)
 Mastercraft Plastics Co Inc 95-01 150th St Jamaica 35 NY (2)
 Molly Corp 230 N Fifth St Reading Pa (2)
 Multi-A-Frame Div Ainsworth Precision Castings Co 1471-77 E Atwater St Detroit 7 Mich (3)
 National Lead Co 111 Broadway NY 6 NY (2)
 New England Carbide Tool Co Inc 55 Commercial St Medford 55 Mass (2)
 Onark Industries 9701 S E McLaughlin Blvd Portland 22 Ore (5)
 ●PAINE CO Fullerton Ave & Westgate Rd Addison Ill (2-4)—ADV PG 164-168
 Polis Mfg Co Toledo Ave & E 28 St Lorain Ohio (2-4)
 Ramset Fastening System Winchester-Western Div Olin Matheson Chemical Corp 12117 Berea Rd Cleveland 11 Ohio (5)
 Rawplug Co Inc 212 Petersville Rd New Rochelle NY (2-4)
 ●REMINGTON ARMS CO INC 939 Barnum Ave Bridgeport 2 Conn (5)—ADV PG 151
 Security Insert Co 1300 Arch St Phila 7 Pa (3)
 Southco Div South Chester Corp Lester Pa (2)
 Star Expansion Mountaintop NY (2-3-4)
 Steel City Electric Co 1207 Columbus Ave Pittsburgh 33 Pa (3)
 U S Expansion Bolt Co State St & PRR York Pa (2-4-6)
 Velocity Power Tool Co 201 N Braddock Ave Pittsburgh 8 Pa (5)
 Walbund (M Paul) Mechanical Laboratory P O Box 16 Grant Iowa (3)

12L. MISCELLANEOUS ELECTRICIANS' TOOLS

1. Hammers, pliers, screwdrivers, scissors
 2. Tool pouches & holders
 3. Fuse pullers
 4. Lamp changers, incandescent
 5. Lamp changers, fluorescent
 6. Test leads & clips
 7. Contact burnishers
- Adre Co 8980 W Hawthorne Lane Hales Corners 5 Wis (7)
 Aircraft Specialties Inc 415 Howard St Lapeer Mich (1)
 Benjamin Electric Mfg Co Northwest Highway & Seegers Rd Des Plaines Ill (4)
 Billings & Spencer Co 1 Laurel St Hartford 1 Conn (1)
 Bodendieck Tool Co P O Box 499 Taylorville Ill (3)
 Bonney Forge & Tool Works 2400 Rockhill Rd (North) Alliance Ohio (1)
 Bridgeport Hardware Mfg Corp Scofield Ave Bridgeport 5 Conn (1)
 Burndy Corp Norwalk Conn (1)
 Chadsey Corp P O Box 1858 Hartford 1 Conn (4-5)
 ●CHAMPION DEARMONT TOOL CO South Main St Meadville Pa (1)—ADV PG 142-146
 Chance (A B) Co 210 North Allen St Centralia Mo (3)

Clauss Cutlery Co Fremont Ohio (1)
 Commercial Enclosed Fuse Co of NJ 6812 Paik St Guttenberg NJ (3)
 Crane-Puller Co Waltham 54 Mass (1)
 Crescent Tool Co 200 Harrison St Jamestown NY (1)
 Dante Electric Mfg Co Bantam Conn (3)
 Diamond Tool and Horseshoe Co 4702 Grand Ave Duluth 7 Minn (1)
 Dreier Brothers Inc 7301 Woodlawn Ave Chicago 19 Ill (1)
 Duro Metal Products Co Kildare & Schubert Sts Chicago Ill (1)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (3)
 Eastern Specialty Co 3617 N 8th St Phila 40 Pa (6)
 Erie Tool Works 12th & Liberty Sts Erie Pa (1)
 Excel Fuse Co 117 W Erie St Pittsburgh 12 Pa (3)
 Forsberg Mfg Co 125 Seaview Ave Bridgeport 1 Conn (1)
 General Hardware Mfg Co Inc 80 White St NY 13 NY (1)
 General Scientific Equipment Co 7516 Limekiln Pike Philadelphia 50 Pa (2)
 ●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1)—ADV PG 4-148
 Greenlee Tool Co 2136 Twelfth St Rockford Ill (1)
 Heller Tool Co Heller Drive Newcomertown Ohio (1)
 Holub Industries Inc 442 Elm St Sycamore Ill (3)
 Hunter Tools 9851 Alburts St Santa Fe Springs Calif (1-2)
 ●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (3)—ADV PG 67-68-69-70
 Industrial Devices Inc Edgewater 19 NJ (6)
 Interstate Drop Forge Co Special Products Div 4051 N 27 St Milwaukee 16 Wis (1)
 Irwin Auger Bit Co 92 Grant St Wilmington Ohio (1)
 Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (3)
 Kedman Co 233 S Fifth West St Salt Lake City Utah (1)
 Kett Tool Co 5055 Madison Rd Cincinnati 27 Ohio (1)
 ●KLEIN (MATHIAS) & SONS 7200 McCormick Rd Chicago 45 Ill (1-2)—ADV PG 161
 Krauter & Co Inc 585 18th Ave Newark 3 NJ (1)
 Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (1)
 Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-3-6)
 McGill Mfg Co Inc Valparaiso Ind (4)
 Mephisto Tool Co Inc Box 16 Hudson NY (1)
 Meteor Mfg Corp Emporium Pa (1)
 Miller Equipment Co Inc 13th & New Streets Franklin Pa (1-2)
 Millers Falls Co 57 Wells St Greenfield Mass (1)
 Mueller Electric Co 1555 E 31 St Cleveland 14 Ohio (6)
 Owatonna Tool Co 374 N Cedar St Owatonna Minn (1)
 Oswall Tool Co Ltd 928 Broadway New York 10 NY (1)
 P & C Tool Co Box 5926 Milwaukee P O Portland 22 Ore (1)
 Pattern Products Co P O Box 135 Union NJ (5)
 Price & Rutzebeck P O Box 30 Hayward Calif (1)
 Producers and Distributors Inc 1321 Hanover Ave Allentown Pa (1)
 Quality Tools Corp New Wilmington Pa (1)
 Rich (Phil) Fan Mfg Co Inc 2900 Caroline Houston 4 Tex (4-5)
 Ridge Tool Co 400 Clark St Elyria Ohio (1)
 Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (4)
 Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (3)
 Shalross Controls Inc 2217-21 N 31 St Milwaukee 8 Wis (1)
 Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill (6)
 Sittler Corp 18 N Ada St Chicago 7 Ill (6)
 Skill Corp 5033 Elston Ave Chicago 30 Ill (1)
 Slaughter Co College & Young Sts Piqua 5 Ohio (6)
 Snap-On-Tools Corp 8028 28th Ave Kenosha Wis (1)
 Sticht (Herman H) Co Inc 27 Park Place New York 7 NY (1)
 Tec Imports 14525 Bessemer St Van Nuys Calif (1)
 Toledo Pipe Threading Machine Co 1445 Summit St Toledo 4 Ohio (1)
 Trico Fuse Mfg Co 2948 N 5th St Milwaukee 12 Wis (3)
 Utica Drop Forge & Tool Div Kelsey-Hayes Co Utica 4 NY (1)
 Vaco Products Co 317 E Ontario St Chicago 11 Ill (1)
 Wilde Tool Co Inc Hiawatha Kans (1)
 Williams (J H) & Co 400 Vulcan St Buffalo 7 NY (1)
 Xcelite Inc Thorne Ave at Bank St Orchard Park NY (1)

12M. CUTTING & DRILLING TOOLS

1. Portable electric drills & saws
2. Hand drilling & boring tools
3. Masonry drills

4. Circle cutters
5. Hole saws
6. Metal cutters & shears
7. Star drill:
8. Plaster groovers & cutters

Albertson & Co Inc 3100 Lowell Sioux City 2 Iowa (1-2)
Arco Mfg Co 1701 13th Ave North (Box 817) Grand Forks ND (1)
Arro Expansion Bolt Co PO Box 388 Marion Ohio (2)
Beverly Shear Mfg Co 3023 W 111 St Chicago 43 Ill (6)
Billings & Spencer Co 1 Laurel St Hartford 1 Conn (6)
Black & Decker Mfg Co Towson 4 Md (1-6)
Burgess Vibrocrafters Grayslake Ill (1)
Capewell Mfg Co 60-70 Governor St Hartford 2 Conn (4)
Chicago Pneumatic Tool Co 6 E 44 St NY 17 NY (1)
Cummins Portable Tool Div John Oster Mfg Co 5055 N Lydell Ave Milwaukee 17 Wis (1)
DeWalt Div American Machine & Foundry Co Fountain Ave Lancaster Pa (1-6)
Diamond Expansion Bolt Co Inc Garwood NJ (2)
Electric Arc Sales Co PO Box 587 Ypsilanti Mich (6)
Electro Engineering Products Co Inc 609 W Lake St Chicago 6 Ill (1)
Equipment Corp of America 1537 Superior Ave Cleveland 14 Ohio (2-3)
Erwood Inc 1770 Berteau Ave Chicago 13 Ill (4)
Gaston Power Tools 999 Ridge Rd Thornton Ill (1)
General Hardware Mfg Co Inc 80 White St New York 13 NY (2-4)
●GREENLEE TOOL CO 2136 Twelfth St Rockford Ill (2)—ADV PG 112-113
Haft & Sons Inc 950 Kent Ave Brooklyn 5 NY (3)
Hayden Twist Drill Co Manila Ark (2)
Holub Industries Inc 442 Elm St Sycamore Ill (2)
Ingersoll-Rand Co 11 Broadway NY 4 NY (1)
Interstate Drop Forge Co Special Products Div 4051 N 27 St Milwaukee 16 Wis (6)
Irwin Auger Bit Co 92 Grant St Wilmington Ohio (2)
Kawneer Co Niles Mich (4)
Kett Tool Co 5055 Madison Rd Cincinnati 27 Ohio (2)
●LINT (CLYDE W) 2323 W 18 St Chicago 8 Ill (6)—ADV PG 159
Mail Tool Co 25000 S Western Ave Park Forest Ill (1)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1)
Mephito Tool Co Inc Box 16 Hudson NY (2)
Mico Instrument Co 80 Trowbridge St Cambridge 18 Mass (4)
Millers Falls Co 57 Wells St Greenfield Mass (1)
Milwaukee Electric Tool Corp 5368 W State St Milwaukee 8 Wis (1)
●MISENER MFG CO INC 202-208 Walton St Syracuse 2 NY (4)—ADV PG 162
O'Neil-Irwin Mfg Co 427 Eighth Ave Lake City Minn (6)
●PAINE CO Fullerton Ave & Westgate Rd Addison Ill (2)—ADV PG 164-168
Peck Stow & Wilcox Co 274 Center St Southington Conn (6)
●PENNSYLVANIA DRILLING CO MASONRY DRILL DIV 1201 Banksville Rd Pittsburgh 16 Pa (2)—ADV PG 160
Porter-Cable Machine Co 700 Marcellus St Syracuse 4 NY (1)
Portonag Inc 1521 E Nine Mile Detroit 20 Mich (3)
Price & Rutzebeck PO Box 30 Hayward Calif (1-2-4)
Producers and Distributors Inc 1321 Hanover Ave Allentown Pa (1)
KCS Tool Corp 227 E Front St (PO Box 661) Bloomington Ill (1)
Rawplugs Co Inc 212 Petersville Rd New Rochelle NY (2)
Renlton Corp 99 N Lotus Ave Pasadena Calif (3)
Robertson & Ruth 460 W Lake St Elmhurst Ill (6)
Rotary Concrete Drill Co 650 S Arroyo Parkway Pasadena 1 Calif (2)
Shallcross Controls Inc 2217-21 N 31 St Milwaukee 8 Wis (1-2-4)
Skill Corp 5033 Elston Ave Chicago 30 Ill (1-2-4)
Snap-On-Tools Corp 8028 28th Ave Kenosha Wis (1-2-4-6)
Stanley Electric Tools 436 Myrtle St New Britain Conn (1-6)
Star Expansion Mountaineer NY (2)
Starrett (LS) Co Athol Mass (4)
Super Tool Co 21650 Hoover Rd Detroit 13 Mich (2)
Symtron Co 690 Lexington Ave Homer City Pa (1)
Tec Imports 14525 Bessemer St Van Nuys Calif (2-4)
Thor Corp 2115 S 54 Ave Chicago 50 Ill (1-2-6)
Thor Power Tool Co 175 N State St Aurora Ill (1-2)
Tilden Tool Mfg Co 209 Los Molinos San Clemente Calif (3)
●TRUCO MASONRY DRILLING DIV WHEEL TRUE-ING TOOL CO 3200-3220 W Davison Ave Detroit 30 Mich (1-2-3)—ADV PG 131

United States Electrical Tool Co 3640 Llewellyn St Cincinnati Ohio (1)
U S Expansion Bolt Co State St & PRR York Pa (1-2)
Wachs (E H) Co 1525 N Dayton St Chicago 22 Ill (6)
●WELLS MFG CORP 250 Service Rd Three Rivers Mich (1-6)—ADV PG 167
Wen Products Inc 5808 Northwest Highway Chicago 31 Ill (1)
Whitman & Barnes Div United Drill and Tool Corp 40600 Plymouth Rd Plymouth Mich (2)
●WOODACK ELECTRIC TOOL CORP 4627 W Huron St Chicago 44 Ill (1-2-8)—ADV PG 163
Wyzenbeck & Staff Inc 223 N California Ave Chicago 12 Ill (1-4)

12N. MACHINE ACCESSORIES

1. Vibration & shock-isolating mounts
2. Static neutralizers & eliminators
3. Oilers
4. Nameplates & decals
5. Display turntables

Linemen's protective clothing & equipment is listed under "Linemen's Tools & Accessories" in Section 12.

Acromark Co 320 Morrell St Elizabeth 4 NJ (4)
Atlantic Engravers Inc 52 Ocean Ave Amityville NY (4)
Brady (WH) Co 727 W Glendale Ave Milwaukee 9 Wis (4)
Chicago Decalcomania Co 3310 Elston Ave Chicago 18 Ill (4)
Dickey-Grabler Co 10302 Madison Ave Cleveland 2 Ohio (4)
Doyle (J E) Co 1220 W 6th St Cleveland 13 Ohio (2)
Eynon-Dakin Co 9900 Freeland Ave Detroit 27 Mich (3)
Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY (3-4)
Lidsen (Gustave) Inc 1000 First St Hayesville NC (3)
Mayer Corp 1961 W 112 St Cleveland 2 Ohio (4)
National Decalcomania Corp 236-38-40 N 60 St Phila 39 Pa (4)
North Shore Name Plate Inc 214-27 Northern Blvd Bayside LI NY (4)
Park Nameplate Co Inc 34-10 Linden Place Flushing NY (4)
Seton Name Plate Co 431 W Rock Ave New Haven 15 Conn (4)
Spencer Industries 1508 N Mascher St Phila 22 Pa (4)
Tightlight Corp 160 E 9th Ave York Pa (4)
Trico Fuse Mfg Co 2948 N 5th St Milwaukee 12 Wis (3)
United States Petroleum Co 104 Lakeview Ave Clifton NJ (3)
United States Radium Corp Hanover Ave Morristown NJ (2-4)
Westline Products Div Western Lithograph Co 600 E Second St Los Angeles 54 Calif (4)

12P. MOTOR & GENERATOR REPLACEMENT PARTS

1. Armatures
2. Bases
3. Bearings & bushings
4. Brushes
5. Brush holders
6. Capacitors, motor-starting
7. Commutators & commutator bars
8. Fields & windings
9. Flexible shafts
10. Frames
11. Shims
12. Terminal boxes
13. Slip rings

Ahlberg Bearing Co 3025 W 47 St Chicago 32 Ill (3)
American Pulley Co 4200 Wissahickon Ave Phila 29 Pa (2)
Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich (3)
Arco Mfg Co 1701 13th Ave North (Box 817) Grand Forks ND (2)
Auburn Mfg Co Pease Ave & Stack St Middletown Conn (11)
Becker Bros Carbon Co 3450 So Laramie Ave Cicero 50 Ill (4)
Boston Gear Works 14 Hayward St Quincy 71 Mass (3)
●BOSTON WOVEN HOSE & RUBBER CO P O Box 1071 Boston 3 Mass (18)—ADV PG 84
Bound Brook Oil-Less Bearing Co Bound Brook NJ (3)
Bronze Bearings Inc 340 N Ave East Cranford NJ (3)
Bunting Brass and Bronze Co 715 Spencer St Toledo 1 Ohio (3)
Carbon Engineering Corp P O Box 256 Slinger Wisc (4)

Carbon Corp 400 Myrtle Ave Boonton NJ (3-4)
Chapin (Chas E) Co Inc 227 Fulton St New York 7 NY (4)
Chicago Commutator Inc Wheeling Rd & Exchange Ct Wheeling Ill (7)
Chicago Die Casting Mfg Co 2510-14 Monroe St Chicago 12 Ill (3)
Co-operative Utilities Co Inc 4637-39 Mulberry St Phila 24 Pa (5)
Cornell-Dubilier Electric Corp 333 Hamilton Blvd South Plainfield NJ (6)
Dayton Precision Mfg Co 213 N Beckel St Dayton 3 Ohio (7)
Electric Materials Co Box 390 North East Pa 50 (7)
Engelhard Industries Inc 113 Astor St Newark 5 NJ (4)
Fafnir Bearing Co 37 Booth St New Britain Conn (4)
Flower (D B) Mfg Co 1217 Spring Garden St Philadelphia 23 Pa (5)
Girard-Hopkins 1000 40th Ave Oakland 1 Calif (6)
Green Ball Bearing Co 9518 Cassius Ave Cleveland 5 Ohio (3)
Guilliam Co 360 Furman St Brooklyn 1 NY (3)
●HELVIG CARBON PRODUCTS INC 2550 N 30 St Milwaukee 10 Wisc (4)—ADV PG 153
Hyatt Bearings Div General Motors Corp Harrison NJ (3)
Illinois Condenser Co 1616 N Throop St Chicago 22 Ill (6)
Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY (11)
Johnson Bronze Co 490 S Mill St New Castle Pa (3)
Keystone Carbon Co Inc 1935 State St St Marys Pa (3-4)
Kirkwood Carbon Corp 4857 W 130 St Cleveland 35 Ohio (4)
Kirkwood Commutator Corp 4855 W 130 St Cleveland 35 Ohio (7-13)
Le (Walter) Chemical Corp 1383 Seabury Ave Bronx 61 NY (11)
Mall Tool Co 25000 S Western Ave Park Forest Ill (9)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (9)
Murray Equipment Co Inc 14011 Oakwood Ave Detroit 3 Mich (2)
National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio (8)
Nice Ball Bearing Co 30th & Hunting Park Ave Phila 40 Pa (3)
Ohio Carbon Co 12508 Berea Rd Cleveland 11 Ohio (4)
Overly-Hautz Co 11500 Madison Ave Cleveland 2 Ohio (2)
Pioneer Gen- E- Motor Co 5841 W Dickens St Chicago 39 Ill (2-2)
Pure Carbon Co Inc 441 Hall Ave St Marys Pa (4)
Pyramid Electric Co 1445 Hudson Blvd North Bergen NJ (6)
Randall Graphite Bearings Inc Greenlaw & Lake Sts Lima Ohio (3)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (1)
SKF Industries Inc Front St & Erie Ave Phila 32 Pa (3)
St. Marys Carbon Co State St St Marys Pa (3-4)
Seeger Standard Carbon Co 291 Church St New York 13 NY (4)
Shenango Furnace Co Centrifugally Cast Products Div West Third St Dover Ohio (3, 13)
Southern Carbon Brush Co Inc #7-18th St S W (P O Box 1710) Birmingham 8 Ala (4)
Southern Electrical Equipment Co 308 W Bland St Mint St Charlotte 3 NC (13)
Sprague Electric Co North Adams Mass (6)
Stackpole Carbon Co Stackpole St St Marys Pa (4)
Stow Mfg Co 162 Shear St Binghamton NY (9)
Superior Carbon Products Co 9115 George Ave Cleveland 5 Ohio (4-13)
Swiss Jewel Co 225 Lafayette Bldg Phila 6 Pa (3)
Toledo Commutator Co 1101 S Chestnut St Owasco Mich (7-13)
Torrington Co 59 Field St Torrington Conn (3)
United States Graphite Co 1621 Holland Ave Saginaw Mich (3-4)
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (4-5)
Westinghouse Electric Corp PO Box 868 Pittsburgh 30 Pa (1-3-4-5-7-8)
Wilmington Fibre Specialty Co New Castle Dela (11)
Wrought Washer Mfg Co 2280 S Bay St Milwaukee 7 Wis (3-11)

12Q. SHEETS, RODS & TUBES

1. Asbestos
2. Cambric
3. Fiber, glass fiber & fiberboard
4. Paper composition
5. Mica
6. Polyester film
7. Pressboard (Fullerboard)
8. Plastic
9. Silicone
10. Varnished silk

Allegheny Plastics Inc Rt 51 & Thorn Run Rd Coraopolis Pa (8)
Anchor Packing Co 401 N Broad St Philadelphia 8 Pa (1)
Auburn Mfg Co Pease Ave & Stack St Middletown Conn (1 thru 9)
Bios Laboratories Inc 17 W 60 St New York 23 NY (5-6-8-9)
Brand Dielectrics 57 North St Willimantic Conn (1 thru 4)
Chase & Sons Inc 26 Spruce St North Quincy Mass (6-8-9)
Connecticut Hard Rubber Co 407 East St New Haven 9 Conn (9)
Continental-Diamond Fibre Newark Del (1-3-4)
Cottrell Paper Co Inc 88 Purchase St Fall River Mass (6)
Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ (1-2-3-4-6-9-10)
Emerson Plastics Corp 1383 Seabury Ave Bronx 61 NY (3-4-5-7-8-9)
General Electric Co Chemical & Metallurgical Div Silicone Products Dept Waterford NY (9)
General Electric Co Chemical & Metallurgical Div Laminated Products Dept Coshocton Ohio (1-2-3-4-9)
General Electric Co Insulating Materials Sec Chemical Materials Dept 24 River Rd Schenectady 5 NY (2-4)
Glastic Corp 4324 Glenridge Rd Cleveland 21 Ohio (8)
Illumitronic Engineering 680 E Taylor Ave Sunnyvale Calif (8)
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (4)
●JOHNS-MANVILLE 22 E 40 St NY 16 NY (1-3)—ADV PG 159
Keesbey & Mattison Co Butler Ave Ambler Pa (1)
Lee (Walter) Chemical Corp 1383 Seabury Ave Bronx 61 NY (8)
Markel (L Frank) & Sons Norristown Pa (3)
Mica Fabricating Co 53 Central Ave Rochelle Park NJ (4-5)
Micacraft Products Inc 701-03 McCarter Highway Newark 5 NJ (5)
Minnesota Mining & Mfg Co Irvington Div 6 Argyle Terrace Irvington 11 NJ (1 thru 6-8-9-10)
Mitchell Rand Insulation Co 51 Murray St NY 7 NY (1-2-4)
Mylaclex Corp of America 125 Clifton Blvd Clifton NJ (5)
National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio (1-2-3-4-5-6-7-8-9-10)
Natvar Corp 211 Randolph Ave Woodbridge NJ (2-4-8-10)
Panelite Div St Regis Paper Co 261 Madison Ave New York 16 NY (8)
Penn Fibre & Specialty Co Inc 2024 E Westmoreland St Phila 34 Pa (3-4-7-8)
Permacel-LePages Inc US Highway #1 New Brunswick NJ (1-4)
Polyken Sales Div Kendall Co 309 W Jackson Blvd Chicago 6 Ill (8)
Polymer Corp 2120 Fairmont Ave Reading Pa (8)
Raybestos-Manhattan Inc 61 Willett St Passaic NJ (1)
Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (3-8)
Ruberoid Co 500 Fifth Ave New York 36 NY (1)
Silicone Insulation Inc 1383 Seabury Ave Bronx 61 NY (3-8-9)
Spaulding Fibre Co Inc 310 Wheeler St Tonawanda NY (3-4-7-8)
Stone Paper Tube Co 900 Franklin St NE Washington 17 DC (4)
Sylvania Electric Products Inc 1740 Broadway NY 19 NY (5)
Taylor Fibre Co Norristown Pa (3-8-9)
Union Carbide Corp Silicones Div 30 E 42 St New York 17 NY (9)
Westinghouse Electric Corp PO Box 868 Pittsburgh 30 Pa (1-3-4-6)
Wilmington Fibre Specialty Co New Castle Dela (3-4-8)

12R. TAPE—PRESSURE-SENSITIVE (ADHESIVE)

1. Cellophane
 2. Electrical
 3. Friction
 4. Masking
 5. Rubber
 6. Varnished cambric
 7. Plastic
- ACCURATE MFG CO 44 Hepworth Pl Garfield NJ (2-3-5-7)—ADV PG 136
Anchor Packing Co 401 N Broad St Philadelphia 8 Pa (2-3)
Apleton Rubber Co Inc 57 Cornwall St Boston 30 Mass (3-5-7)
Bishop Mfg Corp 10 Canfield Rd Cedar Grove NJ (2-5)
●BOSTON WOVEN MOSE & RUBBER CO PO Box 1071 Boston 3 Mass (2-3-5-7)—ADV PG 84
Brand Dielectrics 57 North St Willimantic Conn (2)
Bright Star Industries 600 Getty Ave Clifton NJ (2-3-5-7)

Chase & Sons Inc 26 Spruce St North Quincy Mass (1-2-3-5-7)
Clifton Mfg Co Inc Mattapan Boston 26 Mass (2-3-5-7)
Connecticut Hard Rubber Co 407 East St New Haven 9 Conn (2-7)
Continental-Diamond Fibre Newark Del (2-7)
Dayton Rubber Co Dayton 1 Ohio (2-3-5-7)
Dunton (M W) Co 7 Goff St Providence RI (2-3)
Dutch Brand Div Johns-Manville 7800 S Woodlawn Ave Chicago 19 Ill (2-3-4-5-7)
Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ (1-6-7)
General Electric Co Insulating Materials Sec Chemical Materials Dept 24 River Rd Schenectady 5 NY (6-7)
Goodall Rubber Co 493 Whitehead Rd Trenton NJ (3-5-7)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (2-3-4-5)—ADV PG 4-153
Haartz-Mason Inc 270 Pleasant St Watertown 72 Mass (2-3-5-7)
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (3)
Jenkins Bros Rubber Div 100 Park Ave New York 17 NY (3-5-7)
●JOHNS-MANVILLE 22 E 40 St NY 16 NY (1 thru 7)—ADV PG 159
Labelon Tape Co Inc 450 Atlantic Ave Rochester 9 NY (7)
Lee (Walter) Chemical Corp 1383 Seabury Ave Bronx 61 NY (7)
Linton (Horace) Div Hess Goldsmith & Co Inc 1400 Broadway New York 18 NY (2)
Mica Fabricating Co 53 Central Ave Rochelle Park NJ (2)
Minnesota Mining & Mfg Co Electrical Products Div 900 Bush Ave St Paul 6 Minn (2-5-7)
Minnesota Mining & Mfg Co Irvington Div 6 Argyle Terrace Irvington 11 NJ (1-2-5-6-7)
Mitchell Rand Insulation Co 51 Murray St NY 7 NY (1 thru 7)
Mystik Adhesive Products Inc 2635 N Kildare Ave Chicago 39 Ill (1-2-4-5-7)
National Electric Coil Div McGraw-Edison Co 800 King Avenue Columbus 16 Ohio (1-2-3-4-5-6-7)
Permacel-LePages Inc US Highway #1 New Brunswick NJ (1-2-4-7)
Peters Mfg Co 162 Old Colony Ave Wollaston 70 Mass (2-5)
●PLYMOUTH RUBBER CO INC 23 Revere St Canton Mass (1 thru 5-7)—ADV PG 117
Polyken Sales Div Kendall Co 309 W Jackson Blvd Chicago 6 Ill (4-7)
Polymer Corp 2120 Fairmont Ave Reading Pa (2-7)
Raybestos-Manhattan Inc 61 Willett St Passaic NJ (5-7)
Ruberoid Co 500 Fifth Ave New York 36 NY (3)
Superior Insulating Tape Co 3100 Lambdin Ave St Louis 15 Mo (3-5-7)
Topflight Corp 160 E 9th Ave York Pa (1-2)
United States Rubber Co 1230 Avenue of the Americas New York 20 NY (2-3-4-5-6-7)
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (6)

12S. TAPE—WOVEN & OTHER

1. Asbestos
 2. Cellulose acetate
 3. Cotton
 4. Crepe paper
 5. Polyester
 6. Polyethylene
 7. Glass fiber
 8. Silicone
- Anchor Packing Co 401 N Broad St Philadelphia 8 Pa (1)
Atlas Asbestos Co North Wales Pa (1-7)
Auburn Mfg Co Pease Ave & Stack St Middletown Conn (1-6-8)
Bishop Mfg Corp 10 Canfield Rd Cedar Grove NJ (6)
Brand Dielectrics 57 North St Willimantic Conn (7-8)
Chase & Sons Inc 26 Spruce St North Quincy Mass (1-2-3-6-7-8)
Clifton Mfg Co Inc 34 Topalian St Mattapan Boston 26 Mass (7-8)
Connecticut Hard Rubber Co 407 East St New Haven 9 Conn (8)
Continental-Diamond Fibre Newark Del (1-5-7-8)
Dutch Brand Div Johns-Manville 7800 S Woodlawn Ave Chicago 19 Ill (2-3-4-5-7)
Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ (1-5-8)
General Electric Co Insulating Materials Sec Chemical Materials Dept 24 River Rd Schenectady 5 NY (6-8)
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (1-3)
●JOHNS-MANVILLE 22 E 40 St NY 16 NY (1)—ADV PG 159
Keesbey & Mattison Co Butler Ave Ambler Pa (1)
Minnesota Mining & Mfg Co Irvington Div 6 Argyle Terrace Irvington 11 NJ (1 thru 8)
Mitchell Rand Insulation Co 51 Murray St NY 7 NY (1 thru 4)

National Electric Coil Div McGraw-Edison Co 800 King Avenue Columbus 16 Ohio (1-2-3-4-5-6-7-8)
Natvar Corp 211 Randolph Ave Woodbridge NJ (7-8)
Permacel-LePages Inc US Highway #1 New Brunswick NJ (2-3-4-5-6-7-8)
Peters Mfg Co 162 Old Colony Ave Wollaston 70 Mass (4-5-8)
Plymouth Rubber Co Inc 23 Revere St Canton Mass (6)
Polyken Sales Div Kendall Co 309 W Jackson Blvd Chicago 6 Ill (6-7-8)
Raybestos-Manhattan Inc 61 Willett St Passaic NJ (1)
United States Rubber Co 1230 Avenue of the Americas New York 20 NY (1)
Varflex Corp 508 W Court St Rome NY (5-6-7)
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa (1-3-7-8)

12T. FLEXIBLE SLEEVING & TUBING

1. Cotton
2. Silicone
3. Plastic
4. Rubber
5. Fiber
6. Asbestos

Allegheny Plastics Inc Rt 51 & Thorn Run Rd Coraopolis Pa (3)
Alpha Wire Corp 200 Varick St New York 14 NY (2-3-4-5)
Atlas Asbestos Co North Wales Pa (6)
Automatic Vulcanizers Corp 16 Hudson St New York 13 NY (4)
Brand (William) & Co Inc 51 North St Willimantic Conn (1-2-3)
Connecticut Hard Rubber Co 407 East St New Haven 9 Conn (1-4)
Continental-Diamond Fibre Newark Del (2-3-5)
Goodall Rubber Co 493 Whitehead Rd Trenton NJ (3-4)
Hewitt-Robins Inc 666 Glenbrook Rd Stamford Conn (1-4)
Hitep Wires Inc 1200 Shames Dr Westbury NY (3)
Illumitronic Engineering 680 E Taylor Ave Sunnyvale Calif (3)
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (1-2)
Kirel Inc Box 459A RFD 1 Kingston NY (2)
Lee (Walter) Chemical Corp 1383 Seabury Ave Bronx 61 NY (3)
Minnesota Mining & Mfg Co Irvington Div 6 Argyle Terrace Irvington 11 NJ (1 thru 5)
Mitchell Rand Insulation Co 51 Murray St NY 7 NY (1-2-5)
National Electric Coil Div McGraw-Edison Co 800 King Avenue Columbus 16 Ohio (1-2-3-4-5)
Natvar Corp 211 Randolph Ave Woodbridge NJ (2-3)
Penn Fibre & Specialty Co Inc 2024 E Westmoreland St Phila 34 Pa (3-5)
Permacel-LePages Inc US Highway #1 New Brunswick NJ (3)
Polymer Corp 2120 Fairmont Ave Reading Pa (3)
Saylor Electric Products Corp 277 Pierce St Birmingham Mich (1-3-5)
Snyder (M L) & Son Inc 1897 E York St Phila 25 Pa (3-4)
Stone Paper Tube Co 900 Franklin St NE Washington 17 DC (3-5)
Suflex Corp 33-40 57th St Woodside 77 NY (1-2-3-4-5)
United States Rubber Co 1230 Avenue of the Americas New York 20 NY (3-4)
Varflex Corp 508 W Court St Rome NY (1 thru 5)
Westline Products Div Western Lithograph Co 600 E Second St Los Angeles 54 Calif (3)
Wilmington Fibre Specialty Co New Castle Dela (5)

12O. INSULATING MATERIALS—MISCELLANEOUS

1. Beads
2. Cable wrapping
3. Cement
4. Fused quartz
5. Insulating compounds
6. Varnished canvas (duck cloth)
7. Insulating paint
8. Porcelain insulating products
9. Slate
10. Switchboard mats
11. Varnish
12. Asbestos, ebony & soapstone
13. Insulating paper

American Products Mfg Co Inc 8127-33 Oleander St New Orleans 18 La (5)

Aries Laboratories Inc 45-33 Davis St Long Island City 1 NY (5)
 All-State Welding Alloys Co Inc 249-55 Ferris Ave White Plains NY (5)
 Automatic Vulcanizers Corp 16 Hudson St New York 13 NY (5)
 Barrett Varnish Co 1532 S 50th St Cicero 50 IL (3-7-11)
 Bios Laboratories Inc 17 W 60 St New York 23 NY (3-5-7-11)
 Blackburn (Jasper) Corp 1525 Woodson Rd St Louis 14 Mo (5)
 ●BORTHIG (GEORGE C) CO INC P O Box 115 East Rutherford NJ (3-5-7-11)—ADV PG 150
 Brand Dielectrics 57 North St Willimantic Conn (2-6)
 Central Scientific Co 1700 Irving Pl Rd Chicago 13 Ill (3)
 Connecticut Hard Rubber Co 407 East St New Haven 9 Conn (3)
 Cook's Sons (Adam) Inc 5 N Stiles St Linden NJ (5)
 ●COTRELL PAPER CO INC 88 Purchase St Fall River Mass (13)—ADV PG 146
 Delta Chemical Works Inc 23 W 60 St New York 23 NY (3-5-7-11)
 Dolph (John C) Co Monmouth Junction NJ (5-11)
 Dow Corning Corp Midland Mich (5-11)
 Eagle-Picher Co American Building Cincinnati 1 Ohio (3-5)
 Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ (6)
 Engelhard Industries Inc 113 Astor St Newark 5 NJ (4)
 Fargo Mfg Co Inc 845 Main St Poughkeepsie NY (5)
 G & W Electric Specialty Co 3500 W 127 St Blue Island Ill (5)
 General Electric Co Chemical & Metallurgical Div Silicone Products Dept Waterford NY (5-11)
 General Electric Co Insulating Materials Sec Chemical Materials Dept 24 River Rd Schenectady 5 NY (3-5-6-7-11)
 Goodrich (B F) Chemical Co 3135 Euclid Ave Cleveland 15 Ohio (5)
 Hardman (H V) Co Inc 571 Cortlandt St Belleville 9 NJ (5)
 Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (8)
 I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (8)
 I-T-E Circuit Breaker Co Victor Insulators Div Victor NY (8)
 Illinois Insulation Porcelain McGraw-Edison Co 510 N Pearl St Macomb Ill (8)
 Illumitronic Engineering 680 East Taylor Ave Sunnyside Calif (2)
 Isol-rite Mfg Corp Stillington NJ (1-12)
 ●JOHNS-MANVILLE 22 E 40 St New York 16 NY (3-5-12)—ADV PG 159
 Joy Mfg Co Electrical Products Div 1201 Mackland Ave St Louis 10 Mo (5)
 Laps Insulator Co Inc 35 Gilbert St Leroy NY (8)
 Lastik Paint Inc 201 Iroquois Bldg Pittsburgh 13 Pa (11)
 Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (8)
 Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-3-11)
 Midland Paint & Varnish Co 3801 E 91st St Cleveland 5 Ohio (7-11)
 Mineralec Electric Co 25 N Peoria St Chicago 7 Ill (5)
 Minnesota Mining and Mfg Co Electrical Products Div 900 Bush Ave St Paul & Minn (5)
 Minnesota Mining & Mfg Co Irvington Div 6 Argyle Terrace Irvington 11 NJ (2-3-5-6-7-11)
 Mitchell Rand Insulation Co 51 Murray St NY 7 NY (5-6-7-11)
 National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio (6)
 Natvar Corp 211 Randolph Ave Woodbridge NJ (6)
 New Jersey Porcelain Co Inc Plum St & NY Ave (P O Box 908) Trenton 5 NJ (8)
 PLM Products Inc 3871 W 150 St Cleveland 11 Ohio (5)
 Permacel-Lepages Inc U S Highway #21 New Brunswick NJ (5-11)
 Peters Mfg Co 162 Old Colony Ave Wollaston 70 Mass (5)
 Plymouth Rubber Co Inc 23 Revere St Canton Mass (5)
 Portland-Monson Slate Co 465 Congress St Portland 3 Me (9)
 Pyroil Inc 1889 Front St Cuyahoga Falls Ohio (4)
 Quigley Co Inc 415 Madison Ave New York 17 NY (3-7)
 Raybestos-Manhattan Inc 61 Willett St Passaic NJ (10)
 Robot Industries Inc 7041 Orchard St Dearborn Mich (10)
 Ruberoid Co 500 Fifth Ave New York 36 NY (3)
 Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (5)
 Sauereisen Cements Co 1045 N Canal St Pittsburgh 15 Pa (3-5-7)
 Saxenburg Ceramics P O Box 157 Saxenburg Pa (1-8)
 Schenectady Varnish Co Inc Congress & 9th Sts Schenectady 1 NY (5-11)
 Sherwin-Williams Co 101 Prospect Ave NW Cleveland 1 Ohio (5-7-11)
 Star Porcelain Co Muirhead Ave Trenton 9 NJ (1-8)

Thermal American Fused Quartz Co 18 Salem St Dover NJ (4)
 Union Carbide Corp Silicones Div 30 E 42 St New York 17 NY (5-11)
 United States Rubber Co 1230 Avenue of Americas New York 20 NY (10)
 Wilbur & Williams Co Inc 650 Pleasant St Norwood Mass (7)
 Zipper tubing Co 752 S San Pedro Los Angeles 14 Calif (2)

12P. EXPENDABLE SUPPLIES, MISCELLANEOUS

1. Armature banding
2. Banding & lacing twine
3. Beeswax
4. Cleaning compound
5. Commutator cement
6. Flux & paste
7. Impregnating compound
8. Rust & corrosion preventives
9. Drier erford & sticks
10. Solder
11. Wire-stripping and pulling compounds
12. Wire & cable tags & markers
13. Controller contacts
14. Heat-conducting compounds
15. Selenoid & magnet coils
16. Cable sealing compound
17. Wood preservative

Insulation and tape are listed individually under 12Q, R, S, T and U in this section.

All-State Welding Alloys Co Inc 249-55 Ferris Ave White Plains NY (6-10)
 ●ALLEN (L B) CO INC 5624 N Newark at Bryn Mawr Chicago 31 Ill (6-10)—ADV PG 138
 Alpha Metals Inc P O Box 34 Bergen Station 56 Water St Jersey City 4 NJ (6-10)
 American Products Mfg Co Inc 8127-33 Oleander St New Orleans 18 La (6)
 American Silver Co Inc Industrial Div 36-07 Prince St Flushing 54 NY (6)
 American Solder & Flux Co 19th & Willard Sts Phila 40 Pa (6-8)
 Anaconda Wire & Cable Co 25 Broadway New York 4 NY (12)
 Anchor Metal Co Inc 966 Meeker Ave Brooklyn 22 NY (6-10)
 Arco Mfg & Sales Corp 451 Tenth Ave New York 18 NY (8)
 Automatic Vulcanizers Corp 16 Hudson St New York 13 NY (7-8)
 Benson (Alexander R) Co Inc 2 Davis Rd New Hartford NY (6-10)
 Berry (William B) Co Inc 117 Causeway St Boston 14 Mass (12)
 Bios Laboratories Inc 17 W 60 St New York 23 NY (3-4-6-7-8-9-10)
 Brady (W H) Co 727 W Glendale Ave Milwaukee 9 Wis (12)
 Brand (William) & Co Inc 51 North St Willimantic Conn (12)
 Burnley Battery & Mfg Corp 103 Clay St (P O Box 511) North East Pa (6)
 Cable Electric Products Inc 234 Daboll St Providence 7 RI (6-10)
 Carboline Co 32 Hanley Industrial Ct St Louis 17 Mo (8)
 Carbolineum Wood Preserving Co 6683 N 40 St Milwaukee 9 Wis (8-17)
 Chapin (Chas E) Co Inc 227 Fulton St New York 7 NY (13)
 Chemalloy Electronics Corp Gillespie Field Santee Calif (10)
 Cook's Sons (Adam) Inc 5 N Stiles St Linden NJ (11)
 Cool-Amp Co 8603 W 17 Ave Portland 19 Ore (14)
 Crown Industrial Products Co 713 Amsterdam St Woodstock Ill (8)
 Delta Chemical Works Inc 23 W 60 St New York 23 NY (3-4-6-7-8-10)
 Division Lead Co 7742 W 61 Pl Summit Ill (6-7-9)
 Dow Corning Corp Midland Mich (7-8)
 Dunton (M W) Co 7 Goff St Providence RI (6-10)
 Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (6)
 Early (Edward E) Co 1129 5th St N W Canton 3 Ohio (5)
 Electro Compound Co 4145 W 150 St (P O Box 2772) Cleveland 11 Ohio (11)
 Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 Ill (15)
 ●ELECTRO COMPOUND CO 4145 W 150 St (P O Box 2772) Cleveland 11 Ohio (11)—ADV PG 151
 Engelhard Industries Inc 113 Astor St Newark 5 NJ (6-10)
 Farrelloy Co 1245 N 26 St Phila 21 Pa (6-8-10)
 Federated Metals Div American Smelting & Refining Co 120 Broadway New York 5 NY (6-10)
 Fidelity Chemical Products Corp 470 Frelinghuysen Ave Newark 12 NJ (4-8-11)
 General Electric Co Chemical & Metallurgical Div Silicone Products Dept Waterford NY (7)
 Glastic Corp 4321 Glenridge Rd Cleveland 21 Ohio (9)
 Hardman (H V) Co Inc 571 Cortlandt St Belleville 9 NJ (7)
 ●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (5-11)—ADV PG 67-68-69-70

Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (2-9)
 ●JOHNS-MANVILLE 22 E 40 St New York 16 NY (8-19)—ADV PG 159
 Johnson Mfg Co Inc 600 Anamosa Rd Mt Vernon Iowa (6-10)
 Johnston Foil Mfg Co 6106 S Broadway St Louis 11 Mo (10)
 Jordan Co 51st & Merrimac Ave Chicago 38 Ill (16)
 Keson Solder Co 4201 Wrightwood Ave Chicago 39 Illinois (6-10)
 Keyes-Davis Co 74-14th St Battle Creek Mich (12)
 ●LINT (CLYDE W) 2323 W 18 St Chicago 8 Ill (11)—ADV PG 159
 London Chemical Co Inc 1535 N 31 Ave Melrose Park Ill (6-11)
 Ludlow Mfg & Sales Co P O Box 101 Needham Heights 94 Mass (2)
 Lukens (Thos F) Metal Co Hedley & Bath Sts Philadelphia 37 Pa (6-10)
 Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (5)
 Metal & Thermit Corp Rahway NJ (8)
 Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass (6-10)
 Midland Paint & Varnish Co 3801 E 91st St Cleveland 5 Ohio (8)
 ●MINERALLAC ELECTRIC CO 25 N Peoria St Chicago 7 Ill (11)—ADV PG 156
 Mona Industries Inc Paterson 17 NJ (4-8)
 Monitor Controller Co 99 Grove St Rockland Mass (13)
 National Band & Tag Co 721 York St Newport Ky (12)
 National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio (1-2-3-5-6-7-9-10)
 National Lead Co 111 Broadway NY 6 NY (6-10)
 North Shore Nameplate Inc 214-27 Northern Blvd Bayville LI NY (12)
 Northwoods Mfg Chemists Inc Porterfield Wis (4)
 Ohio Carbon Co 12508 Berea Rd Cleveland 11 Ohio (13)
 Okun (A L) Co Inc 109-02 Van Wyck Expressway South Ozone Park NY (10)
 Penetone Co 74 Hudson Ave Tenafly NJ (4-8)
 Penn Fibre & Specialty Co Inc 2024 E Westmoreland St Phila 34 Pa (12)
 Permacel-Lepages Inc U S Highway #21 New Brunswick NJ (4-7)
 ●PLYMOUTH RUBBER CO INC 23 Revere St Canton Mass (18)—ADV PG 117
 Premax Products Div Chisholm-Ryder Co Inc College & Highland Aves Niagara Falls NY (12)
 River Smelting & Refining Co 4195 Bradley Rd (P O Box 5755) Cleveland 1 Ohio (10)
 Ruby Chemical Co 68-70 McDowell St (P O Box 1108) Columbus 16 Ohio (6-10)
 Rust-Oleum Corp 2425 Oakton St Evanston Ill (8)
 Seton Name Plate Co 431 W Rock Ave New Haven 15 Conn (12)
 Sherwin-Williams Co 101 Prospect Ave NW Cleveland 1 Ohio (7)
 Silicone Insulation Inc 1383 Seabury Ave Bronx 61 NY (9)
 Sittler Corp 18 N Ada St Chicago 7 Ill (5)
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 Stokole Carbon Co Stokole St St Marys Pa (13)
 Subox Inc Fairmont Plant Hackensack NJ (8)
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 Superior Carbon Products Co 9115 George Ave Cleveland 5 Ohio (13)
 Therman Mfg Co 1017 Rosine St Houston Tex (14)
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 Turco Products Inc 24600 S Main St Wilmington Calif (4-8)
 Union Carbide Corp Silicones Div 30 E 42 St New York 17 NY (7-16)
 Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (5-13)
 Westinghouse Electric Corp P O Box 868, Pittsburgh 30 Pa (13)
 Westline Products Div Western Lithograph Co 600 E Second St Los Angeles 54 Calif (12)
 Wilbur & Williams Co Inc 650 Pleasant St Norwood Mass (8)
 Wilmington Fibre Specialty Co New Castle Dela (9)

12W. PERSONNEL PROTECTIVE EQUIPMENT

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3. Face shields & masks
4. Respirators

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*Code No.	Catalog No. & Mfr.	
12-1	Inert Gas Arc Welding of Aluminum; 116p; Cat. No. ADI 1258 (Air Reduction)	12-11 Arc Welders; 24p; Cat. No. EW-204 (Hobart)
12-2	Which Welding-Power Source Should You Use? 10p (Air Reduction)	12-12 Welding Assortories; 18p; Cat. No. EW-203 (Hobart)
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		12-22 Insulating Varnishes and Filling Compounds; 8p; Cat. No. IV-509 (Sherwin-Williams)
		12-23 Wire and Cable Reels; 8p; (Suttle)
		12-24 Wire and Pipe Self-Adhering Markers; 45 p (Westline)

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July, 1958 through June, 1959

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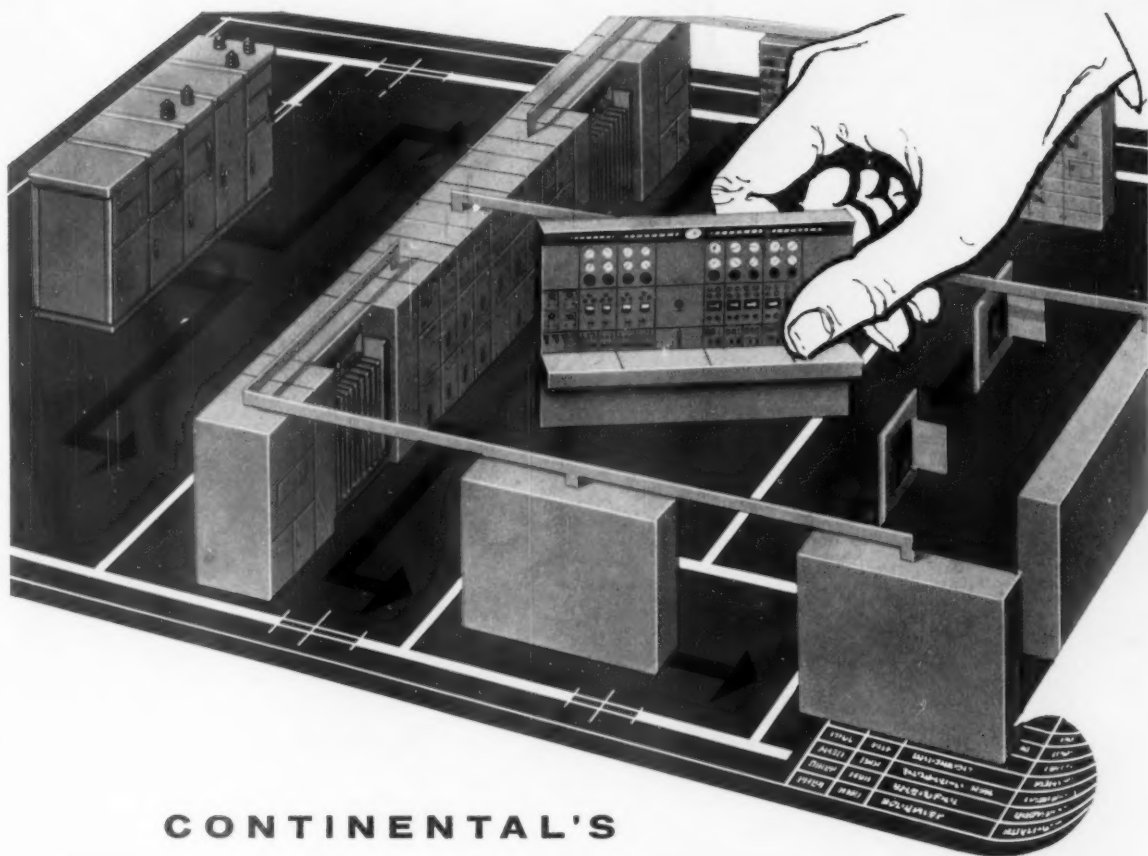
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